

GEOHYDROLOGY AND 1985 WATER WITHDRAWALS OF THE
AQUIFER SYSTEMS IN SOUTHWEST FLORIDA, WITH
EMPHASIS ON THE INTERMEDIATE AQUIFER SYSTEM

By A.D. Duerr, J.D. Hunn, B.R. Lewelling, and J.T. Trommer

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations Report 87-4259

Prepared in cooperation with the
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT



Tallahassee, Florida

1988

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ABSTRACT

In a 4,700-square-mile area of southwest Florida, principal hydrogeologic units are the surficial aquifer system, the intermediate aquifer system, and the Floridan aquifer system. The thickness of the surficial aquifer system ranges from 25 to 250 feet, and transmissivity ranges from about 1,100 to about 8,000 feet squared per day.

The intermediate aquifer system includes all water-bearing units and confining units between the overlying surficial aquifer system and the underlying Floridan aquifer system. The top of the intermediate aquifer system ranges from more than 100 feet below sea level in Highlands County to more than 100 feet above sea level in central Polk County. Thickness ranges from less than 100 feet to more than 800 feet, and transmissivity ranges from less than 200 to about 13,000 feet squared per day. Leakance of the confining units ranges from 1×10^{-7} to 4×10^{-4} foot per day per foot.

The Floridan aquifer system consists of the Upper and Lower Floridan aquifers separated by a "tight" middle confining unit. Transmissivity of the Upper Floridan aquifer in the study area ranges from about 30,000 feet squared per day at the gulf coast where the freshwater zone is thin to about 400,000 feet squared per day in eastern De Soto and Hardee Counties.

The altitude of the potentiometric surface of the intermediate aquifer system in September 1985 ranged from 120 feet above sea level in Polk County to less than 20 feet above sea level near the coast. In the northern part of the study area, water levels are higher in the intermediate aquifer system than water levels in the underlying Upper Floridan aquifer. The hydraulic gradient reverses in the southern part of the area.

In 1985, in the study area, an estimated 808 million gallons per day of freshwater was withdrawn from the surficial and intermediate aquifer systems and Upper Floridan aquifer for irrigation, public and rural supply, and industrial use. Of this total, an estimated 68.9 million gallons per day was withdrawn from the intermediate aquifer system.

INTRODUCTION

Southwest Florida has developed rapidly during the 1980's and in 1985 was one of the leading population growth areas in the State. Associated with this growth is an increasing demand for water for public supply, industrial, and agricultural uses.

In southwest Florida, ground water is the principal source of freshwater because of the lack of adequate surface-water storage. Three hydrogeologic units serve as a source of freshwater: the surficial aquifer system, the intermediate aquifer system, and the Floridan aquifer system. Because of low yield to wells and the potential for pollution, the surficial aquifer system has limited use, generally for lawn and garden irrigating and stock watering. The Upper Floridan aquifer of the Floridan aquifer system is the principal source of supply and yields large quantities of freshwater to wells in most areas. However, in the southern and coastal parts of the study area, the Upper Floridan aquifer contains water with a high mineral content. The intermediate aquifer system is an important source of water in Charlotte and Sarasota Counties; it also is used as a source of water throughout much of De Soto, Hardee, Highlands, Hillsborough, Manatee, and Polk Counties, although yields of individual wells and total withdrawal of water from the aquifer are generally much less than from wells open to the deeper Upper Floridan aquifer.

As the demand for water in southwest Florida increases, more information about the intermediate aquifer system is needed in order to more efficiently develop and manage this aquifer system as a water-supply source. Thus, in 1983, the U.S. Geological Survey, in cooperation with the Southwest Florida Water Management District, began a project to study the geohydrology of the intermediate aquifer system in southwest Florida.

Purpose and Scope

The purpose of this report is to present geohydrologic and water-use information on the intermediate aquifer system that will aid in the management of the aquifer system. Information on the surficial and Floridan aquifer systems is also presented but in less detail. The study area includes the southern half of the Southwest Florida Water Management District, an area of about 4,700 mi², and includes all of De Soto, Hardee, Manatee, and Sarasota Counties and parts of Charlotte, Highlands, Hillsborough, and Polk Counties (fig. 1).

This report presents a description of the surficial, intermediate, and Floridan aquifer systems, defines the geohydrologic framework, and presents water-withdrawal data, potentiometric-surface maps, a table showing records of wells, and an index of geophysical logs. The depth, thickness, and extent of the intermediate aquifer system was determined from geologic and geophysical logs of wells from the files of the U.S. Geological Survey, the Florida Bureau of Geology, and the Southwest Florida Water Management District. A network of water-level observation wells was established and measured to determine the potentiometric surface of the intermediate aquifer system for September 1985 and May 1986.

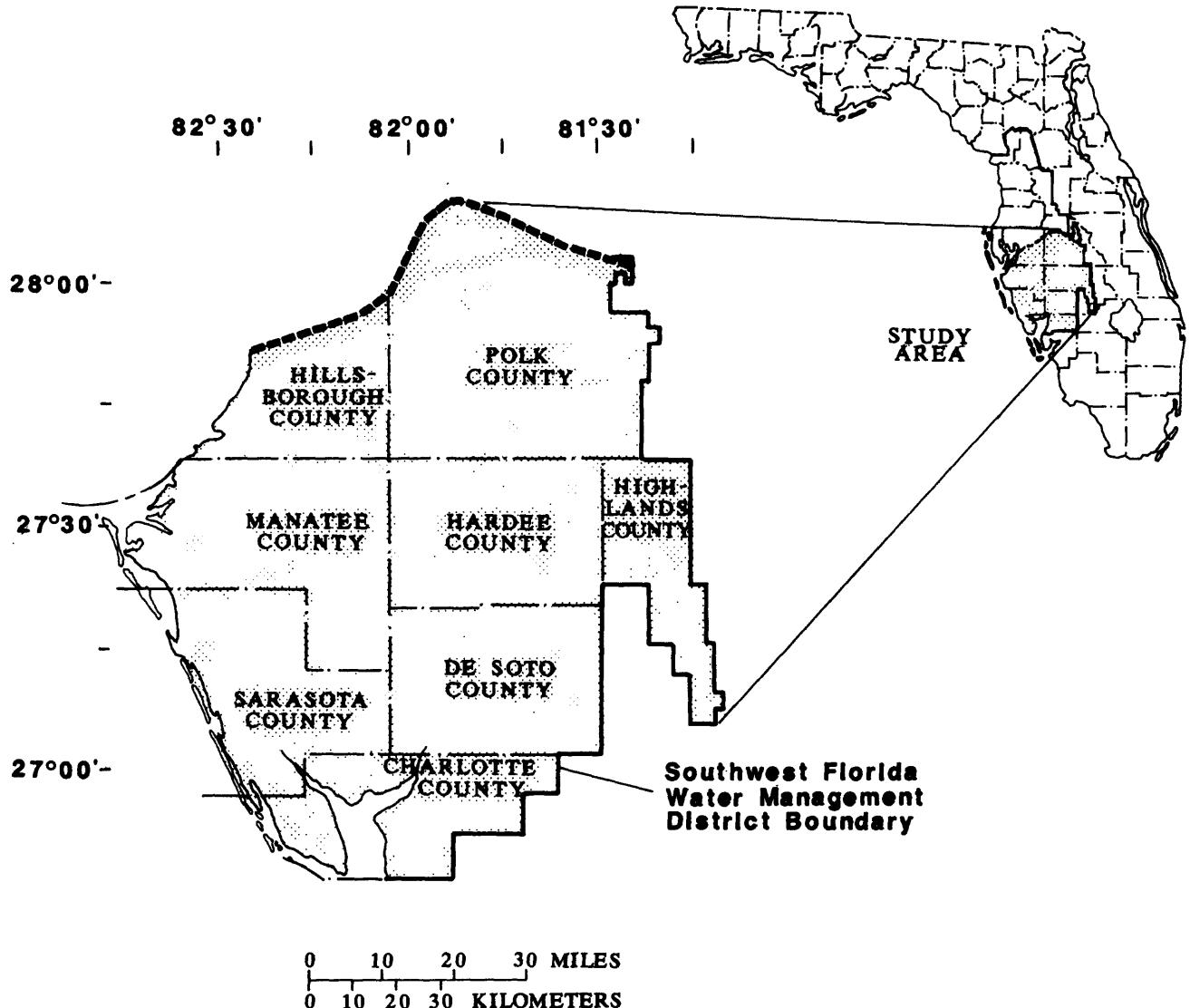


Figure 1.--Location of study area.

Previous Investigations

Numerous reports have been written about the geology and hydrology of southwest Florida, but few reports focus specifically on the intermediate aquifer system. Most of the published information about the aquifer system is limited to public well fields and phosphate plant sites where test drilling has been completed and aquifer tests conducted.

Several previous reports provide geologic and ground-water information. Stringfield (1933a; 1933b) described the geology and ground-water conditions in Sarasota County. Heath and Smith (1954) described the ground-water resources in Pinellas County. The stratigraphy of shallow deposits in De Soto and Hardee Counties was reported by Bergendahl (1956). Bishop (1956) identified marine and nonmarine deposits of the Hawthorn Formation in Highlands County. Peek (1958; 1959a; 1959b) described the geology and ground-water resources in Manatee and southwest Hillsborough Counties. The water resources of Hillsborough County also were described by Menke and others (1961). Eppert (1966) reported on the stratigraphy of the upper Miocene deposits in Sarasota County, and Stewart (1966) described the ground-water resources of Polk County. Kaufman and Dion (1968) presented data on the ground-water resources of Charlotte, De Soto, and Hardee Counties. The water resources of Charlotte County were further described by Sutcliffe (1975). Joyner and Sutcliffe (1976) reported on the water resources of the Myakka River basin area. Wilson (1977) provided information on the ground-water resources of De Soto and Hardee Counties that included the geology and hydrology of the intermediate aquifer. Hutchinson (1978) gave an appraisal of the shallow ground-water resources in the upper Peace and eastern Alafia River basins.

Buono and others (1979) presented the generalized thickness of the confining unit overlying the Upper Floridan aquifer throughout southwest Florida. Franks (1982) presented summary information on the principal aquifers in Florida. Brown (1983) described the upper confining unit and presented water-level data for the intermediate aquifer system in Manatee County. Wolansky (1983) subdivided the intermediate aquifer into several units in the Sarasota-Port Charlotte area. A description of the intermediate aquifer was included by Miller (1986) in his regional description of the Floridan aquifer system. Corral and Wolansky (1984) mapped the configuration of the top of the intermediate aquifer system in southwest Florida but did not include the confining layer below the surficial aquifer system as part of the intermediate aquifer system. The geology of the intermediate aquifer system was included in a report by Ryder (1985) describing the hydrology of the Floridan aquifer system in west-central Florida. A report by Duerr and Wolansky (1986) described the hydrogeology of the surficial and intermediate aquifer systems of central Sarasota County, Florida.

Description of the Area

The area is highly urbanized near the coast and rural in the interior. Major industries include agriculture, phosphate mining, chemical processing, food processing, and tourism. Agricultural land use includes citrus groves, vegetable farms, nurseries, and rangeland.

Topography is characterized by a low-lying coastal plain that gradually rises toward the east and is bordered by sand-covered ridges more than 150 feet above sea level (fig. 2). There are numerous lakes in the ridge areas. Surface-water drainage is relatively well developed with streams draining south and west into the Gulf of Mexico.

The climate of southwest Florida is characterized by warm, humid summers and mild, moderately dry winters. The Gulf of Mexico moderates the extremes in temperature so that winter low temperatures are several degrees higher along the coast than in inland areas. The average July temperature at Wauchula (fig. 3) is 81.5 °F and the average January temperature is 61.5 °F. Rainfall varies seasonally with more than half the annual total occurring from June to September. Average rainfall from five weather stations (A through E, fig. 3) for the period 1915 to 1976 was 53.1 in/yr (Palmer and Bone, 1977, p. 6).

GEOHYDROLOGIC FRAMEWORK AND HYDRAULIC PROPERTIES

The geohydrologic system in the study area consists of thick sequences of carbonate rock overlain by clastic deposits. Principal hydrogeologic units are the surficial aquifer system, the intermediate aquifer system, and the Floridan aquifer system (Southeastern Geological Society, 1986). The hydrogeologic units, the corresponding time-stratigraphic units, and general lithology are given in table 1.

The surficial aquifer system overlies the intermediate aquifer system and consists of Holocene and Pleistocene deposits containing sand, clayey sand, shell, shelly marl, and some phosphorite. The thickness of the deposits was mapped by Wolansky, Spechler, and Buono (1979). Thickness ranges from about 25 feet near the coast and low-lying areas to about 250 feet in Highlands County. The surficial aquifer system is a major source of recharge to the intermediate aquifer system. The surficial aquifer system is unconfined and is not a major source of water except in the southern part of the study area where deeper limestone aquifers are highly mineralized.

The hydraulic properties of the surficial aquifer system vary with saturated thickness and lithology. Wolansky (1983, p. 16) reported hydraulic properties from six aquifer tests in Sarasota and southwestern De Soto Counties; transmissivity ranges from 600 to 8,000 ft²/d, and storage coefficient determined from two tests ranges from 0.05 to 0.16. R.M. Wolansky (U.S. Geological Survey, written commun., 1980) reported a transmissivity of 1,800 ft²/d for a site in southeast Hillsborough County. For two sites in southern Polk County, Hutchinson (1978, p. 20) reported transmissivities of 1,600 and 2,200 ft²/d and storage coefficients of 0.05 and 0.005. Wilson (1977, p. 28) estimated an average transmissivity of about 1,100 ft²/d for the surficial aquifer system in Hardee and De Soto Counties.

The intermediate aquifer system includes all water-bearing units (aquifers) and confining units between the overlying surficial aquifer system and the underlying Floridan aquifer system. The water-bearing units of the intermediate aquifer system consist of discontinuous sand, gravel, shell, and limestone and dolomite beds in the Tamiami Formation of early Pliocene age and the Hawthorn Formation of late and middle Miocene age. The intermediate

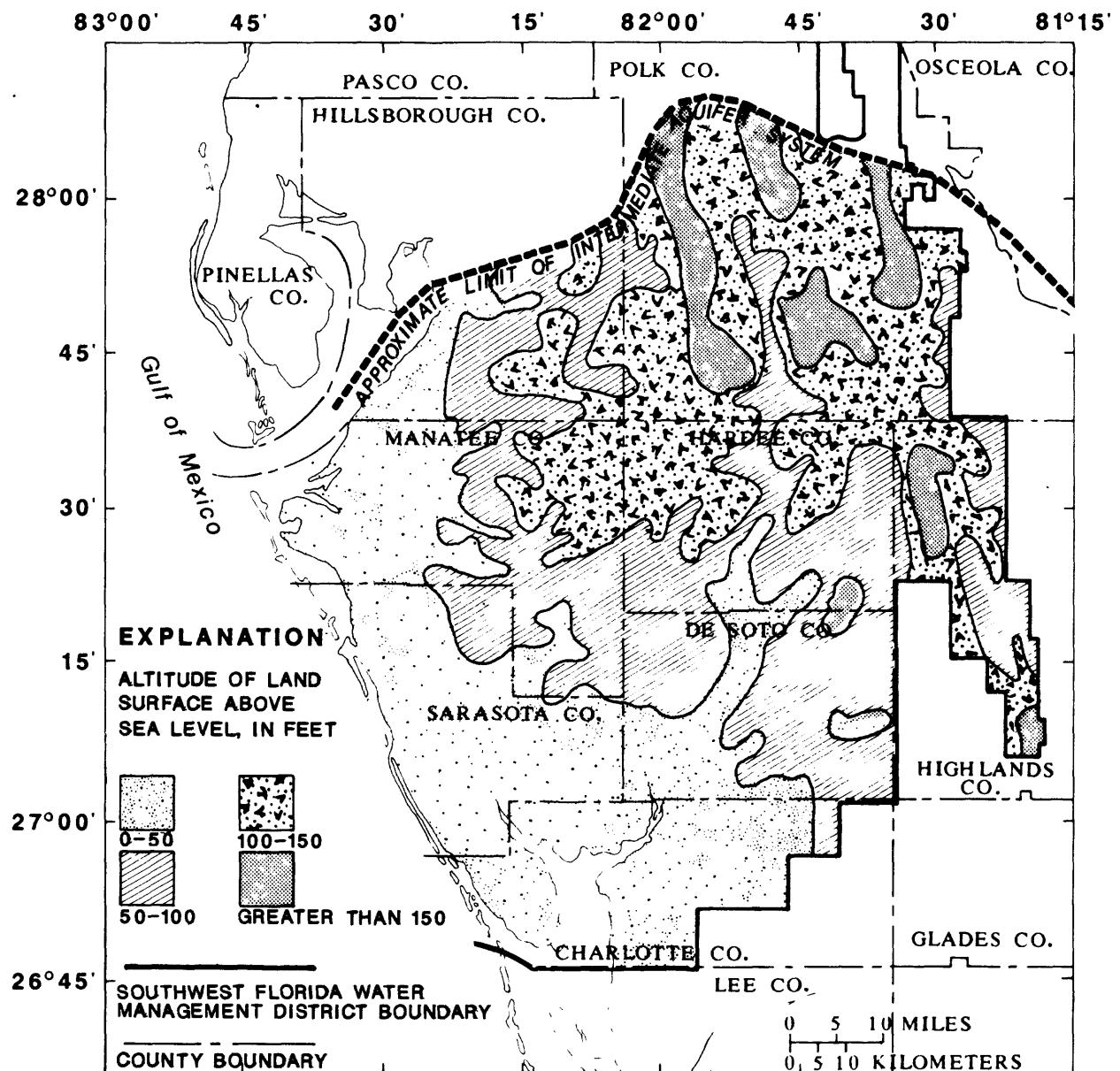


Figure 2.--Topography of southwest Florida.
(From Sinclair and others, 1985.)

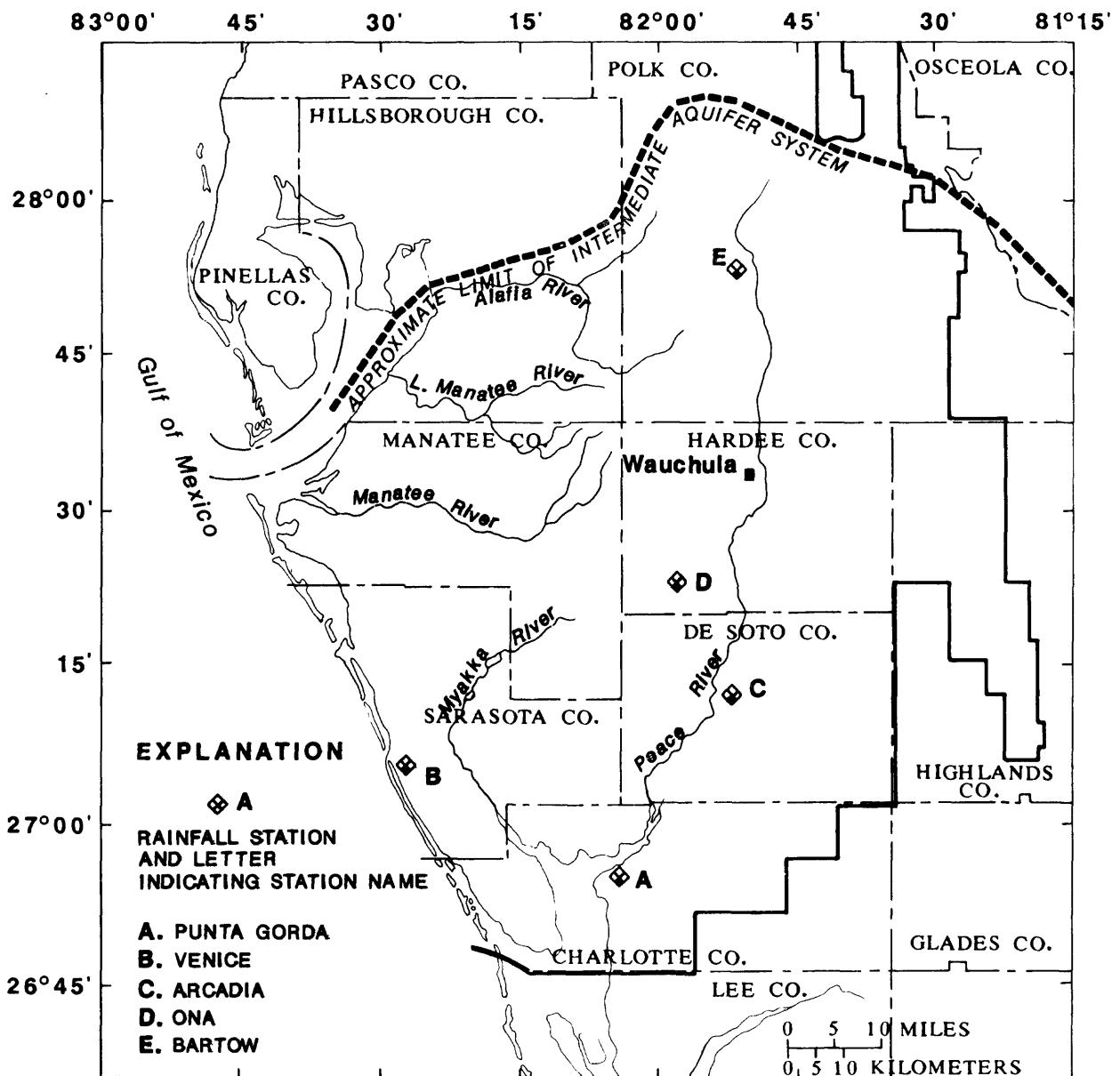


Figure 3.--Locations of rivers and rainfall stations.

Table 1.—Geohydrologic framework
[Modified from Ryder, 1985, table 1]

System	Series	Stratigraphic unit	General lithology	Major lithologic unit	Hydrogeologic unit
Quaternary	Holocene and Pleistocene	Surficial sand, terrace sand, phosphorite	Predominantly fine sand; interbedded clay, marl, shell, and phosphorite.	Sand	SURFICIAL AQUIFER SYSTEM
	Undifferentiated deposits ¹	Tamiami Formation	Clayey and pebbly sand; clay, marl, shell, phosphatic.	Clastic	Confining unit
Tertiary	Pliocene	Hawthorn Formation	Dolomite, sand, clay, and limestone; silty, phosphatic.	Carbonate and clastic	INTERMEDIATE AQUIFER SYSTEM
	Miocene	Tampa Limestone	Limestone, sandy, phosphatic, fossiliferous; sand and clay in lower part in some areas	Confining unit	Aquifer
Oligocene	Swansee Limestone		Limestone, sandy limestone, fossiliferous.		
	Eocene	Ocala Limestone	Limestone, chalky, foraminiferal, dolomitic near bottom.	Carbonate	FLORIDAN AQUIFER SYSTEM
	Avon Park Formation		Limestone and hard brown dolomite; intergranular evap- orite in lower part in some areas.		Upper Floridan aquifer
	Oldsmar Formation		Dolomite and limestone, with intergranular gypsum in most areas.		Middle confining unit
Paleocene	Cedar Keys Formation		Dolomite and limestone with beds of anhydrite.	Carbonate with evaporites	Lower Floridan aquifer
					Sub-Floridan con- fining unit

¹Includes all or parts of Caloosahatchee Marl and Bone Valley Formation.

aquifer system contains confining units that consist of sandy clay, clay, and marl. These confining units retard vertical movement of ground water between the water-bearing units and the overlying surficial aquifer system and the underlying Upper Floridan aquifer.

In parts of Polk, Manatee, Hardee, De Soto, Sarasota, and Charlotte Counties, sand and clay beds within the Tampa Limestone are hydraulically connected to the Hawthorn Formation and are also included in the intermediate aquifer system (Corral and Wolansky, 1984). In these areas, a confining unit separates the Tampa Limestone from the underlying Floridan aquifer system.

Within the intermediate aquifer system are deposits of sufficient permeability to be used as important water supplies in coastal areas. In coastal Charlotte and Sarasota Counties, the intermediate aquifer system contains some slightly saline water that is treated by reverse osmosis before it is used for public supply (Sutcliffe and Thompson, 1983). In other parts of the study area, water from the intermediate aquifer system receives only minimal treatment before being distributed for use.

The intermediate aquifer system thus consists of three hydrogeologic units (table 1): (1) a sandy clay and clayey sand confining unit in the lower part that lies directly on top of the Floridan aquifer system; (2) an aquifer system that consists of one, two, or three water-bearing units (aquifers) composed primarily of sand and carbonate rocks; and (3) a sandy clay, clay, and marl confining unit in the upper part that separates the aquifers in the intermediate aquifer system from the overlying surficial aquifer system (Ryder, 1985).

The water-bearing units (aquifers) of the intermediate aquifer system are equivalent to the secondary artesian aquifer as used by Stewart (1966) for Polk County; to zones 2 and 3 as used by Sutcliffe (1975) for Charlotte County; to the upper and lower Hawthorn aquifers as used by Sproul and others (1972) for part of Lee County; and to the upper unit of the Floridan aquifer as used by Wilson (1977) for De Soto and Hardee Counties.

The locations of six generalized geohydrologic sections are shown in figure 4. The sections, shown in figures 5 through 10, were constructed primarily from geologists' logs of test wells. Geophysical logs also were used for correlating aquifers. The sections show the relative positions of the surficial, intermediate, and Floridan aquifer systems. The sections also show the confining units and water-bearing units (aquifers) at specific test holes within the intermediate aquifer system. There are lateral inconsistencies between interpretations of rock stratigraphic units in the study area and they are not included in the sections.

In southwest Florida, the top of the intermediate aquifer system ranges from more than 100 feet below sea level in Highlands County to more than 100 feet above sea level in central Polk County (fig. 11). Throughout most of the southern and western parts of the study area, the top of the intermediate aquifer system is within 50 feet of sea level. Along the gulf coast, it lies about 20 feet below sea level. The thickness of the intermediate aquifer system ranges from less than 100 feet in central Hillsborough and northern Polk Counties to more than 800 feet in southern Charlotte County (figs. 6, 7, and 12). The intermediate aquifer system is intermittent near its northern extent and its boundary is approximated by a dashed line in figure 12. The bottom of the intermediate aquifer system (top of the Floridan aquifer system)

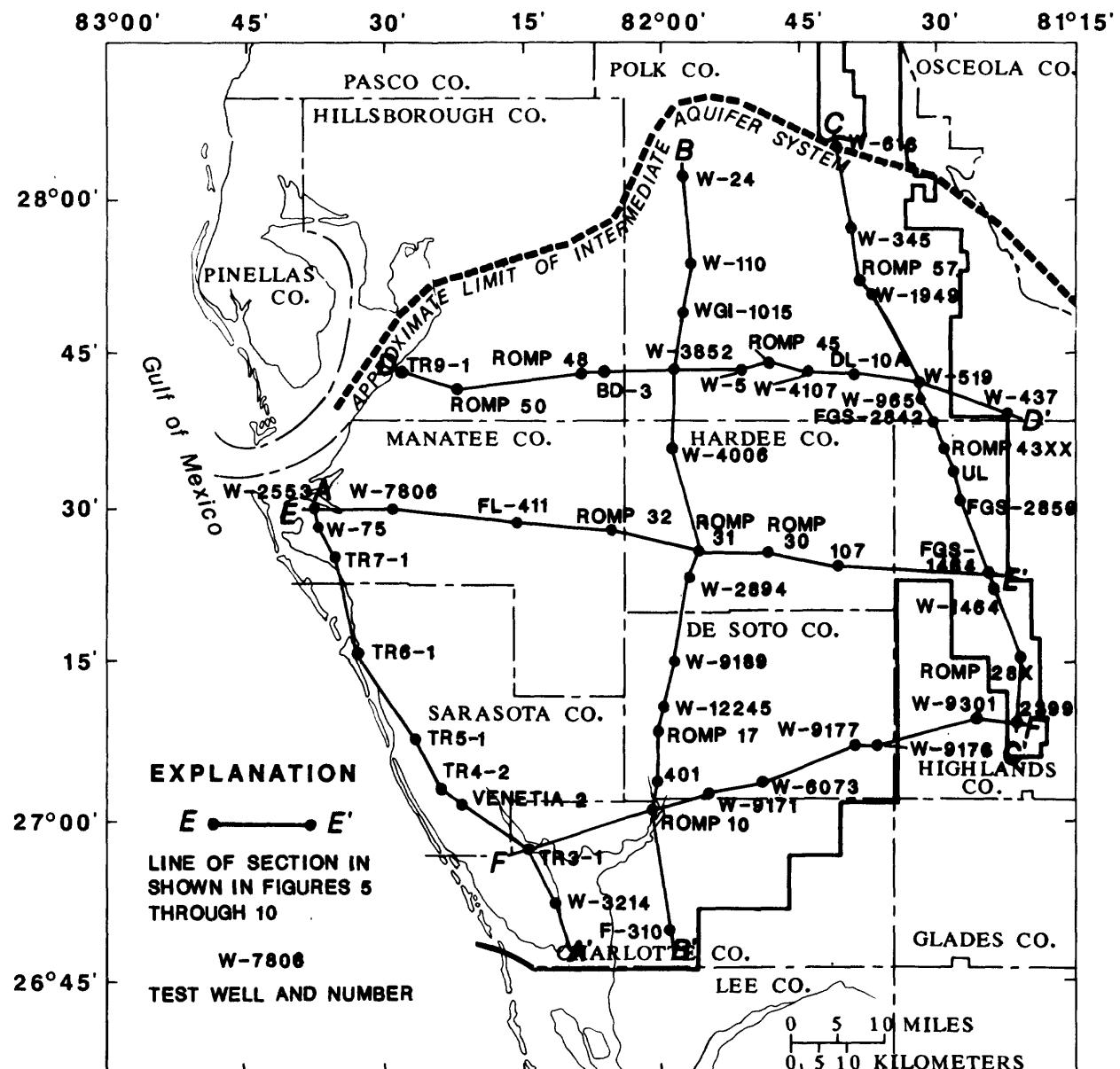


Figure 4.--Locations of generalized geohydrologic sections.

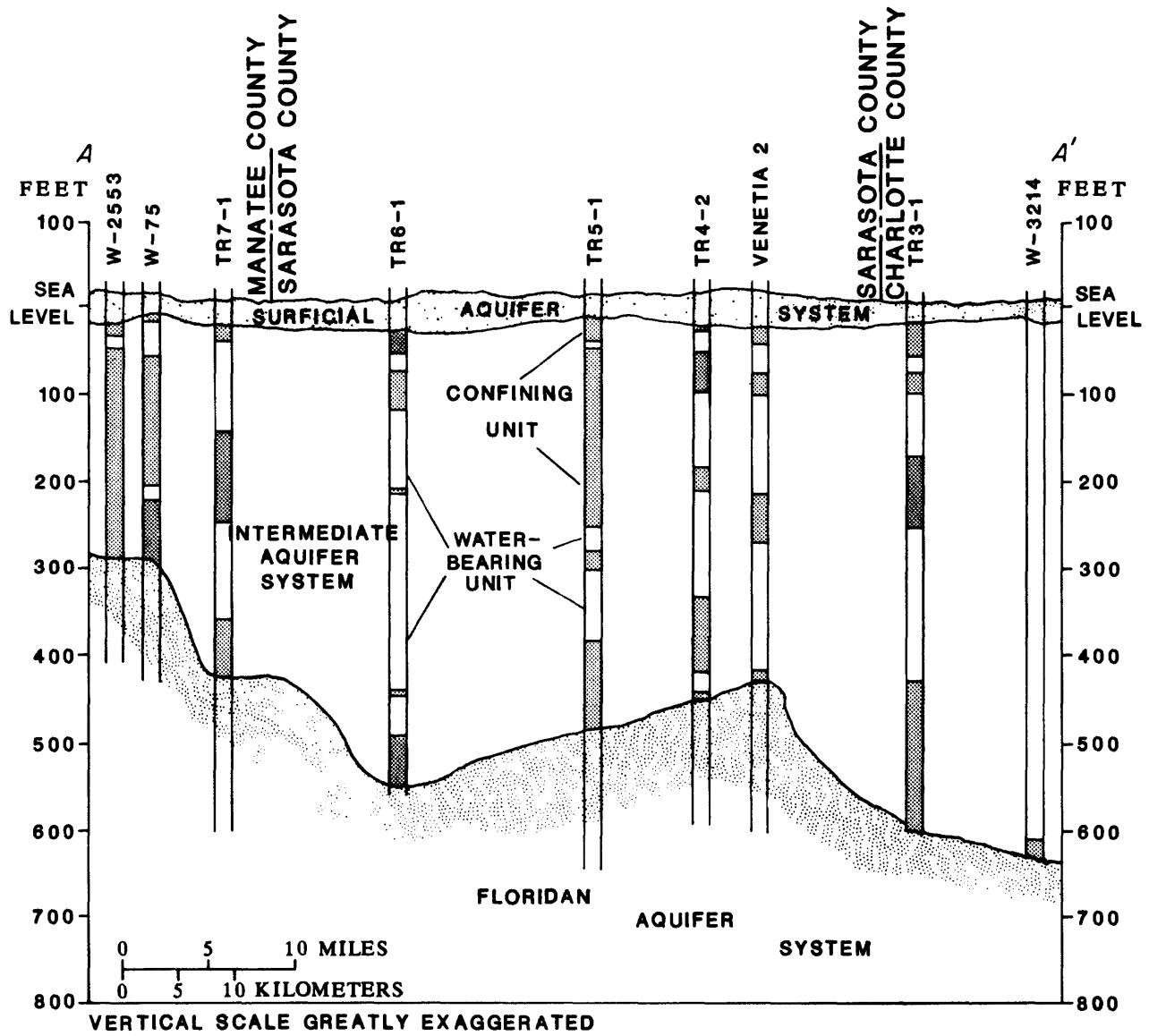


Figure 5.--Generalized geohydrologic section A-A'.

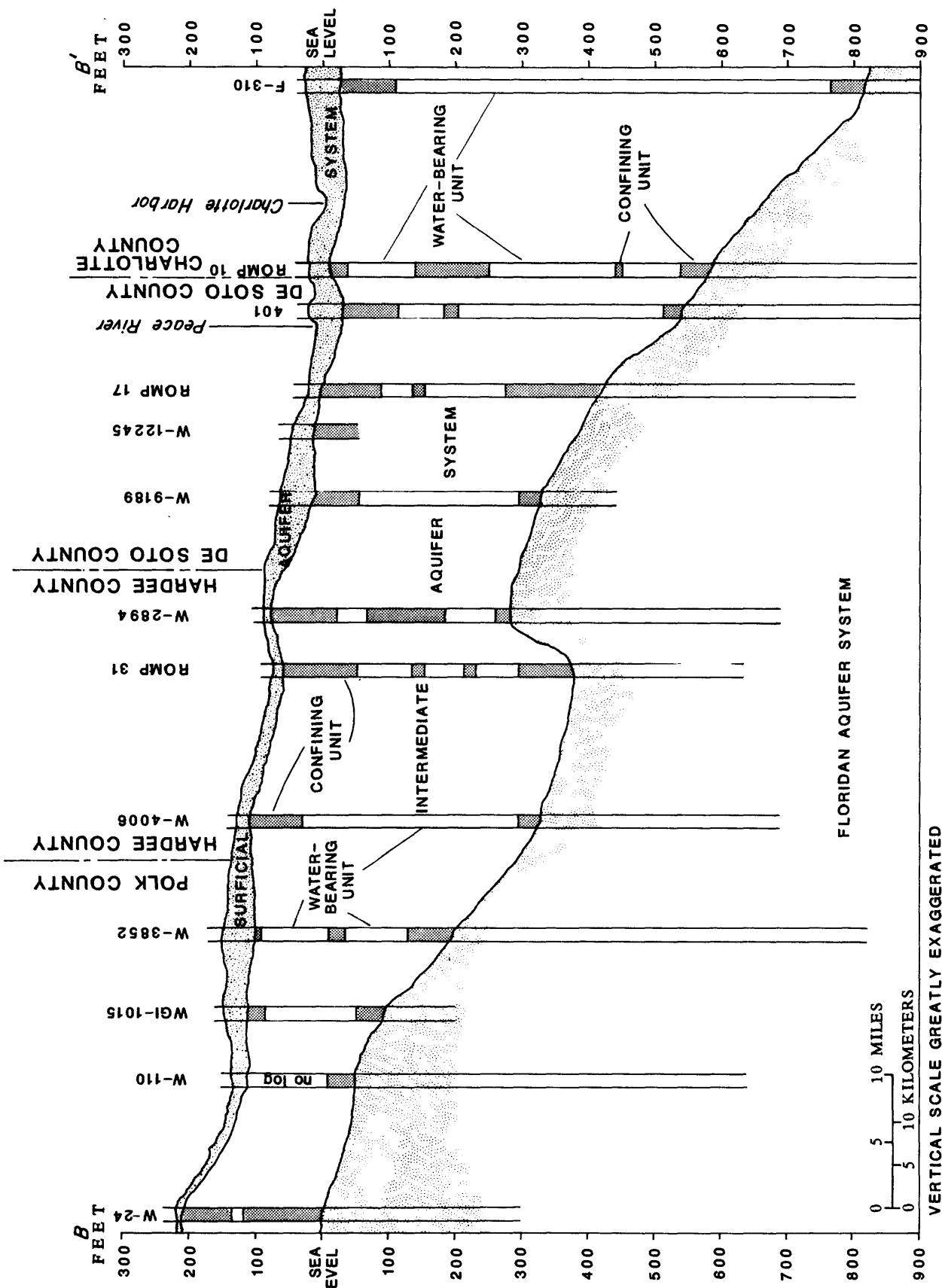


Figure 6.--Generalized geohydrologic section B-B'.

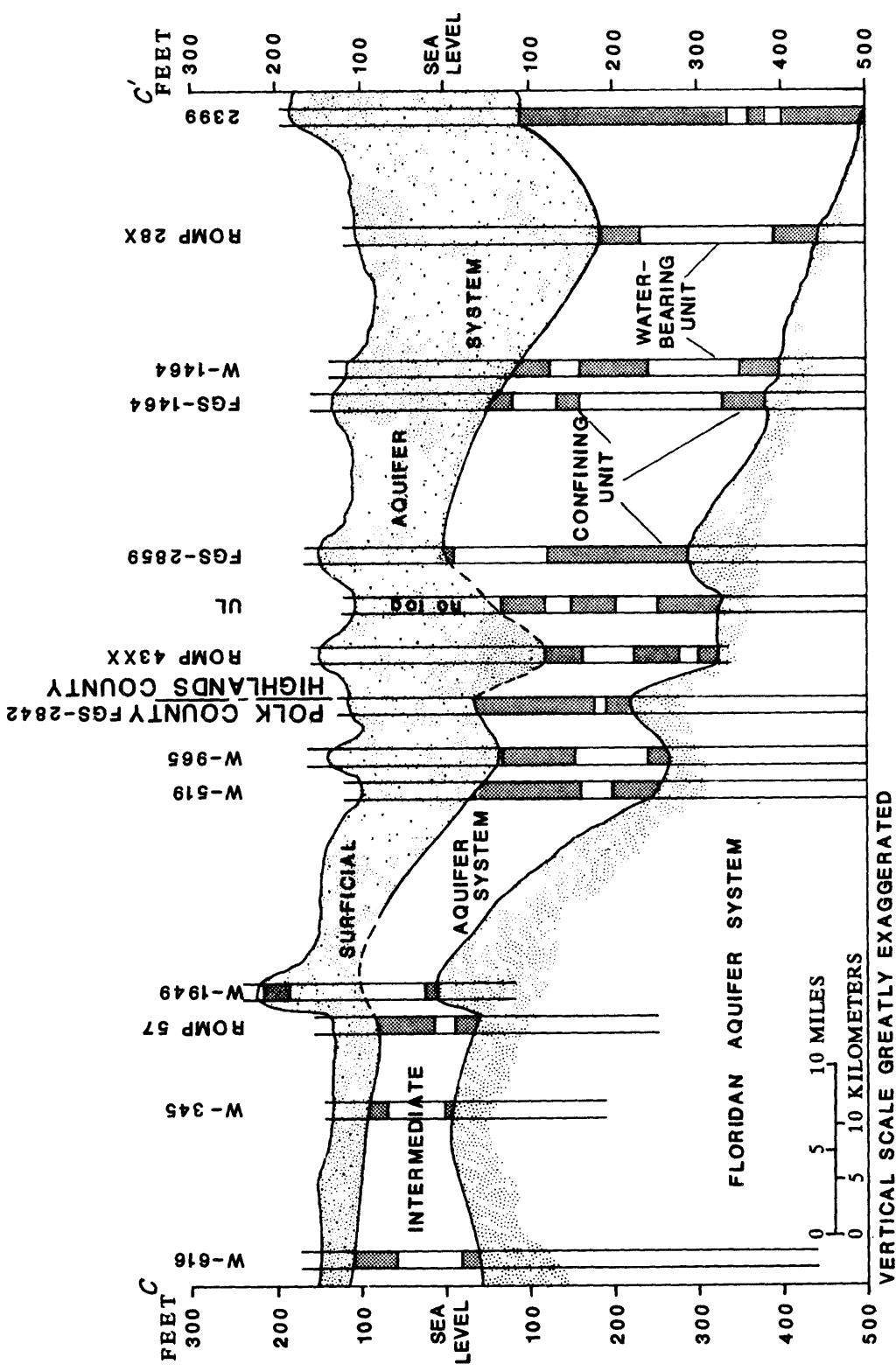


Figure 7.--Generalized geohydrologic section C-C'.

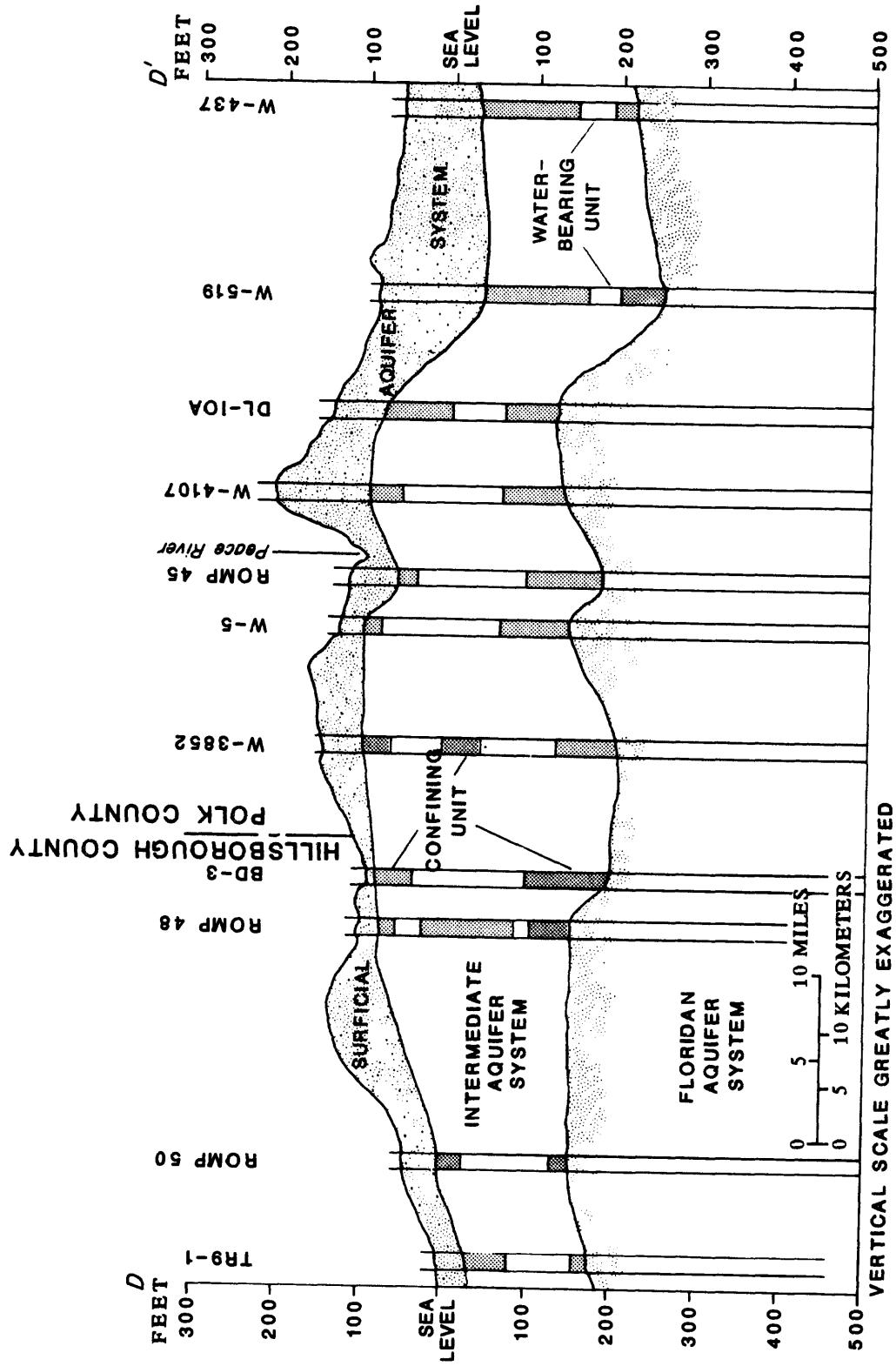


Figure 8.--Generalized geohydrologic section D-D'.

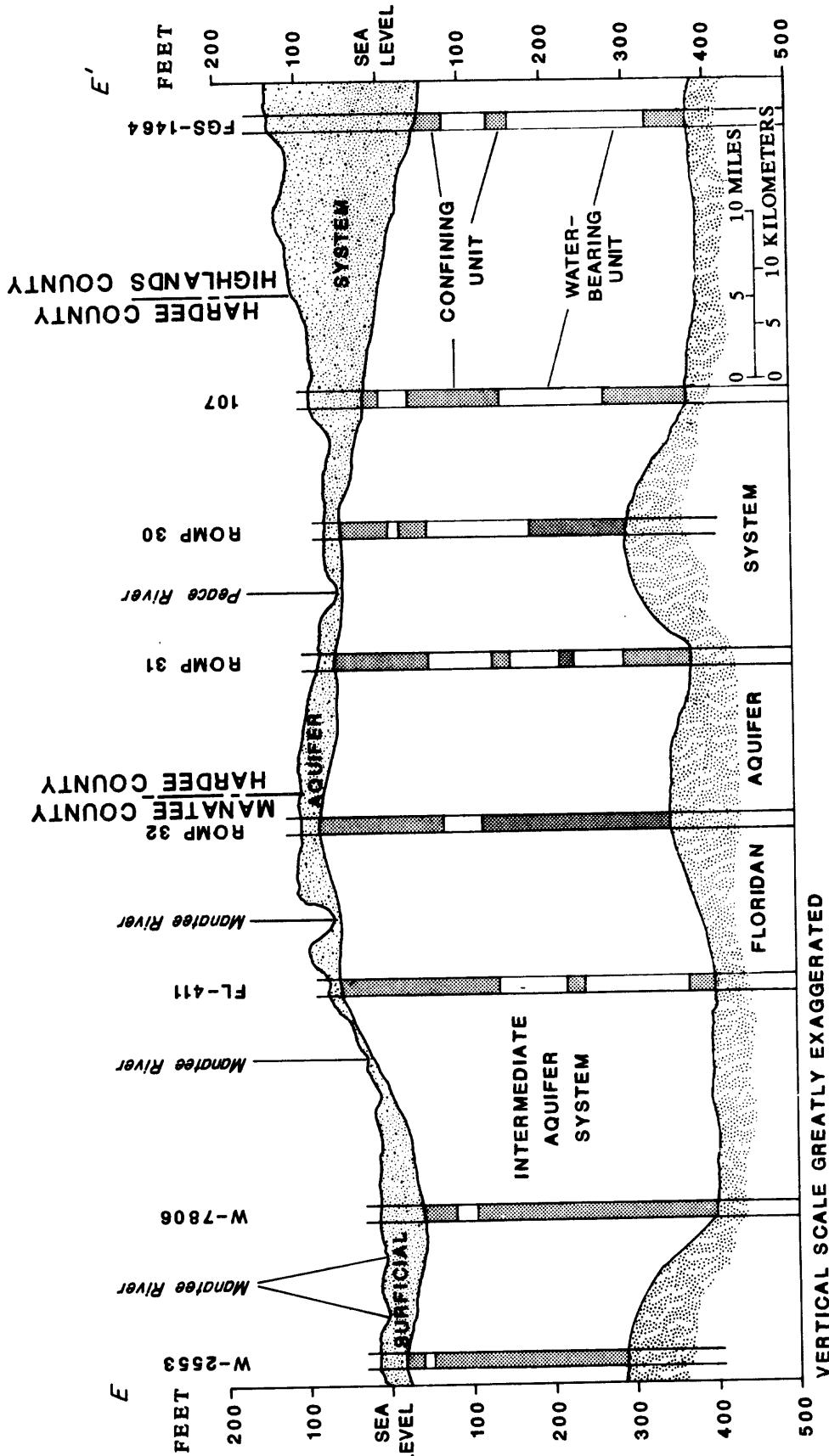


Figure 9.--Generalized geohydrologic section E-E'.

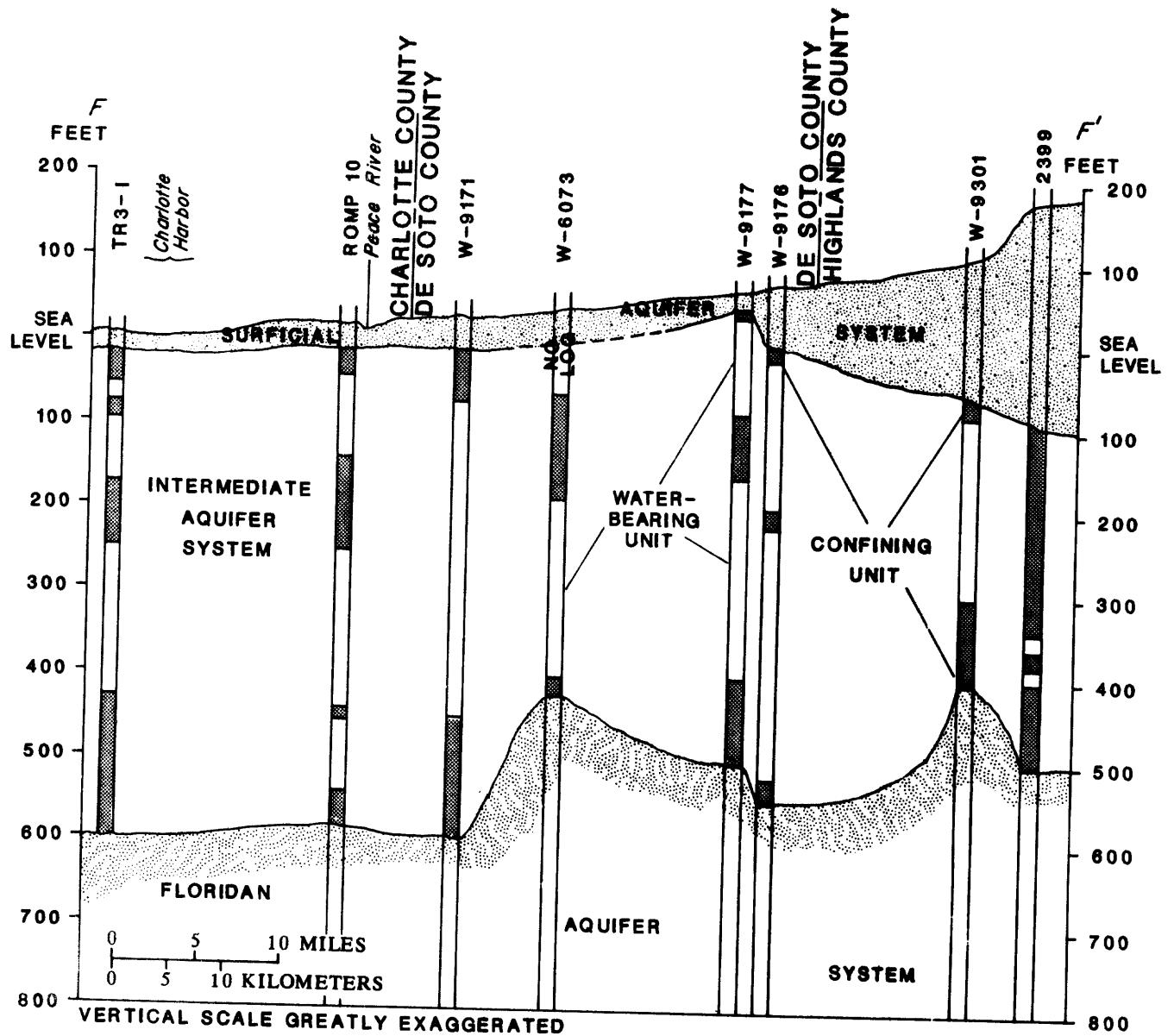


Figure 10.--Generalized geohydrologic section F-F'.

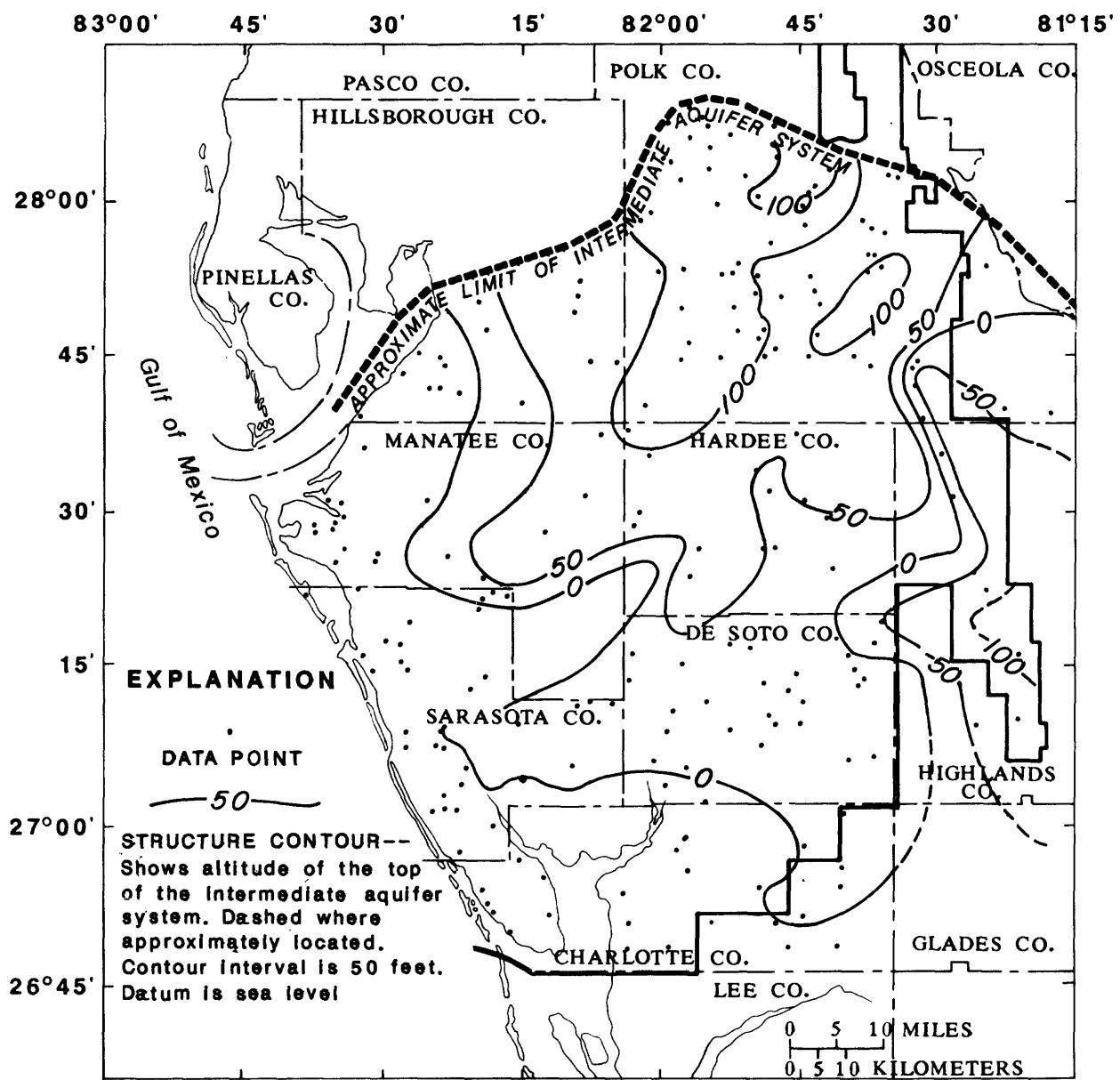


Figure 11.--Altitude of the top of the intermediate aquifer system.

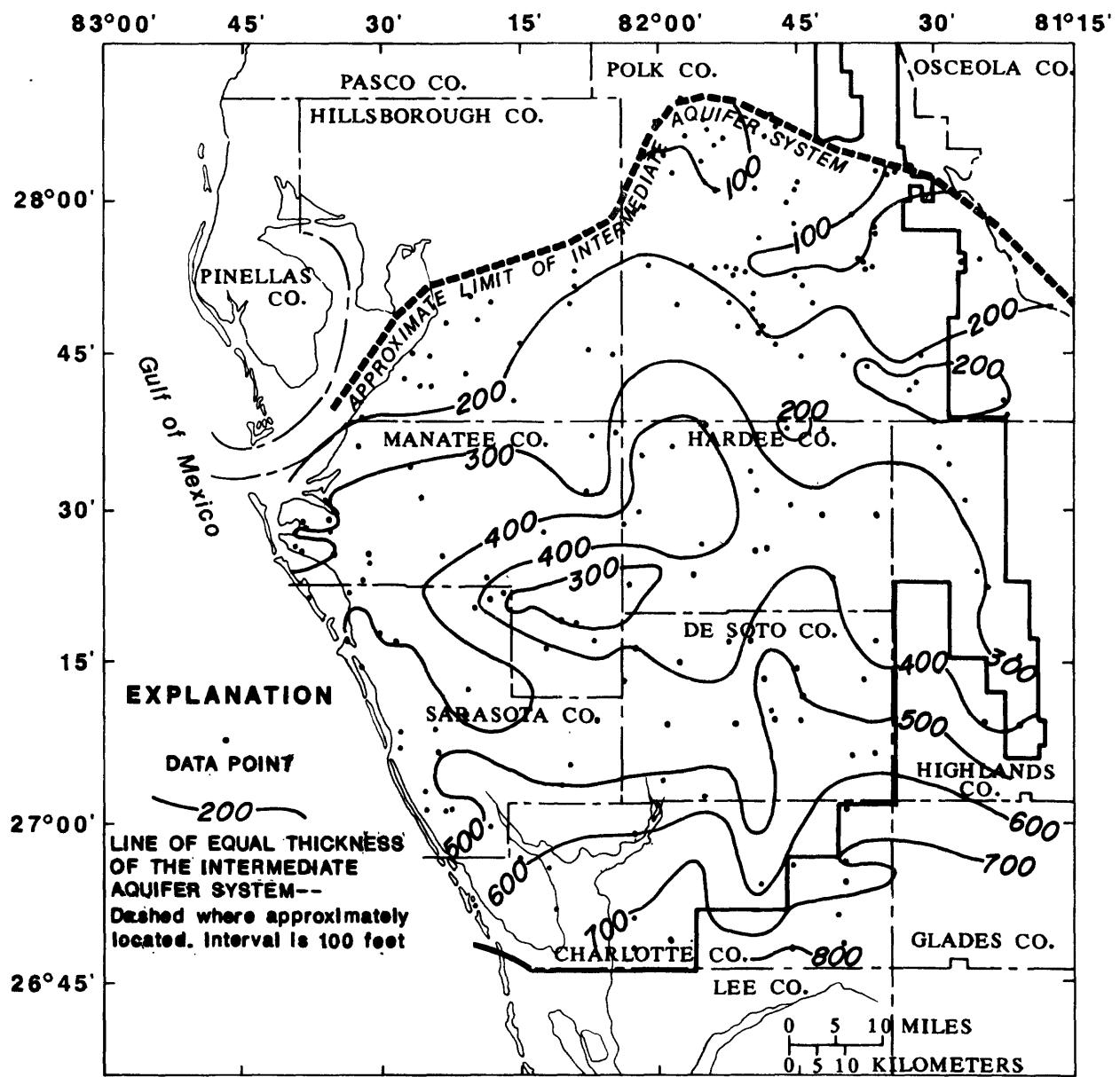


Figure 12.--Thickness of the intermediate aquifer system.

ranges from about 50 feet above sea level in northern Polk county to more than 800 feet below sea level in southern Charlotte County (fig. 13).

Transmissivities of the water-bearing units of the intermediate aquifer system, as determined by field tests, are shown in figure 14 (Ryder, 1982). Transmissivity ranges from less than 200 to about 13,000 ft²/d. Transmissivity is generally less than 1,000 ft²/d in eastern Hillsborough and northern Polk Counties where the permeable deposits are thin. Near the Peace River, transmissivity is generally higher than 4,000 ft²/d, indicating that perhaps a more active flow system exists in a carbonate section where ground water discharges to the river and the carbonate rocks' secondary porosity has been enhanced by dissolution, thus providing greater permeability (Ryder, 1982, p. 23).

Clay beds of limited lateral extent and variable thickness may occur within the water-bearing units of the intermediate aquifer system, particularly near the coast. Where laterally persistent clay beds occur, the water-bearing units have been separated into two or three local artesian zones by some investigators (Joyner and Sutcliffe, 1976; Sutcliffe and Thompson, 1983; Wolansky, 1983).

The water-bearing units of the intermediate aquifer system are confined above and below by less permeable material. Leakance of the uppermost confining unit used by Ryder (1985) in a ground-water flow model of west-central Florida ranges from 7×10^{-6} (ft/d)/ft in western Manatee County to 4×10^{-4} (ft/d)/ft near the Tampa Bay coast in southwest Hillsborough County. Leakance of the lowermost confining unit of the intermediate aquifer system ranges from 1×10^{-7} (ft/d)/ft in southwest Sarasota and western Charlotte Counties to 7×10^{-5} (ft/d)/ft in the eastern part of the study area (Ryder, 1985). The confining units have low hydraulic conductivity and consequently retard interaquifer ground-water flow and yield little water to wells. However, these confining units do transmit, or leak, water from one aquifer to another, and the system is referred to as a leaky-aquifer system (Wilson, 1977, p. 37).

The underlying Floridan aquifer system is defined as a vertically continuous sequence of carbonate rocks of generally high permeability that are of Tertiary age, that are hydraulically connected to each other in varying degrees, and whose permeability is several orders of magnitude greater than that of the rocks that bound the system above and below (Ryder, 1985).

The Floridan aquifer system (Miller, 1986) consists of the Upper and Lower Floridan aquifers separated by a "tight" middle confining unit. The middle unit and Lower Floridan aquifer generally contain saltwater (Ryder, 1985). In most reports on the hydrology of southwest Florida, the term "Floridan aquifer" has been applied to the water-bearing rocks herein referred to as the Upper Floridan aquifer. It is the major source of fresh ground water for most of southwest Florida. Transmissivity of the Upper Floridan aquifer in the study area ranges from about 30,000 ft²/d at the gulf coast where the freshwater zone is thin to about 400,000 ft²/d in eastern De Soto and Hardee Counties (Ryder, 1985).

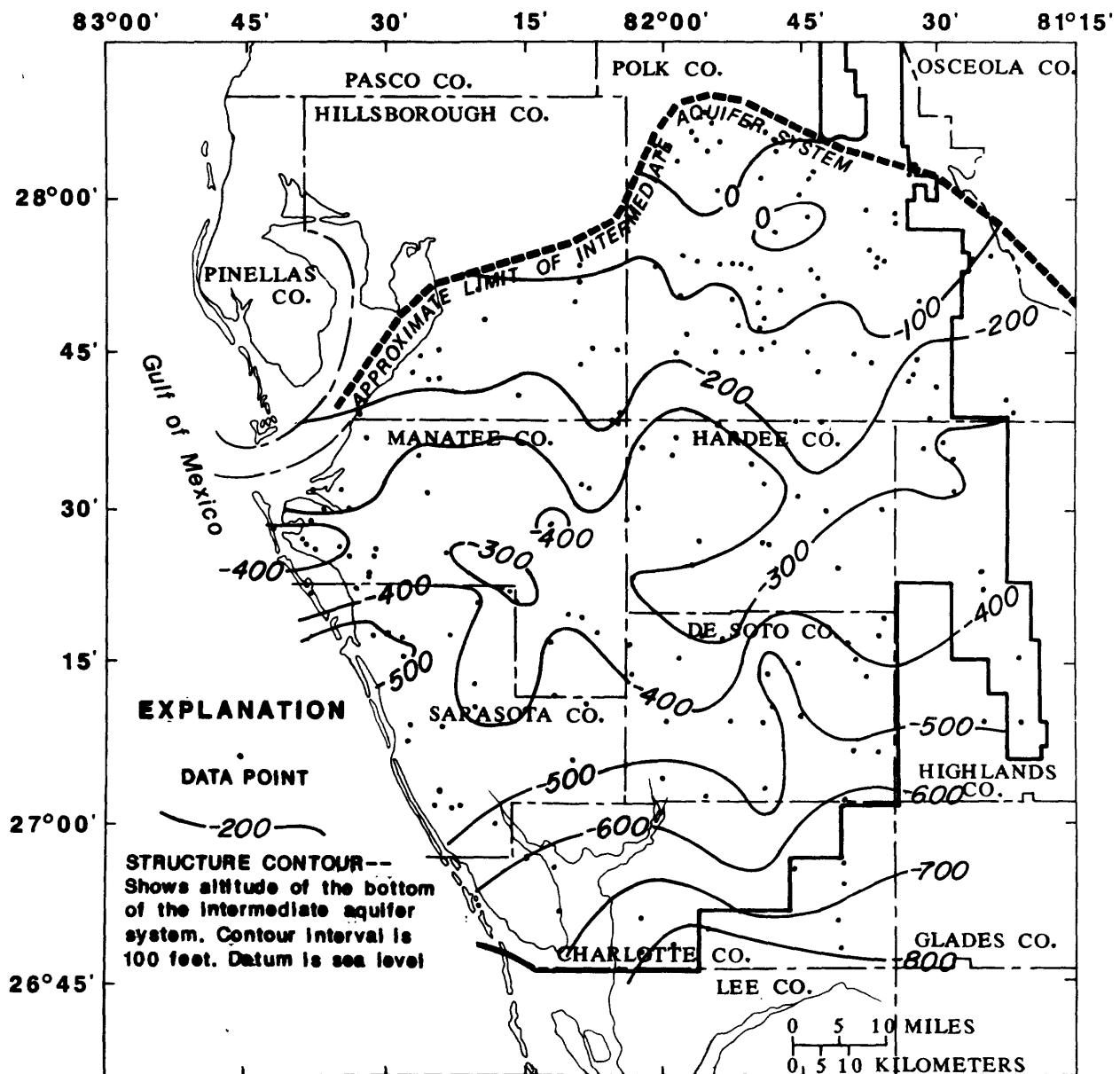


Figure 13.--Altitude of the bottom of the intermediate aquifer system.

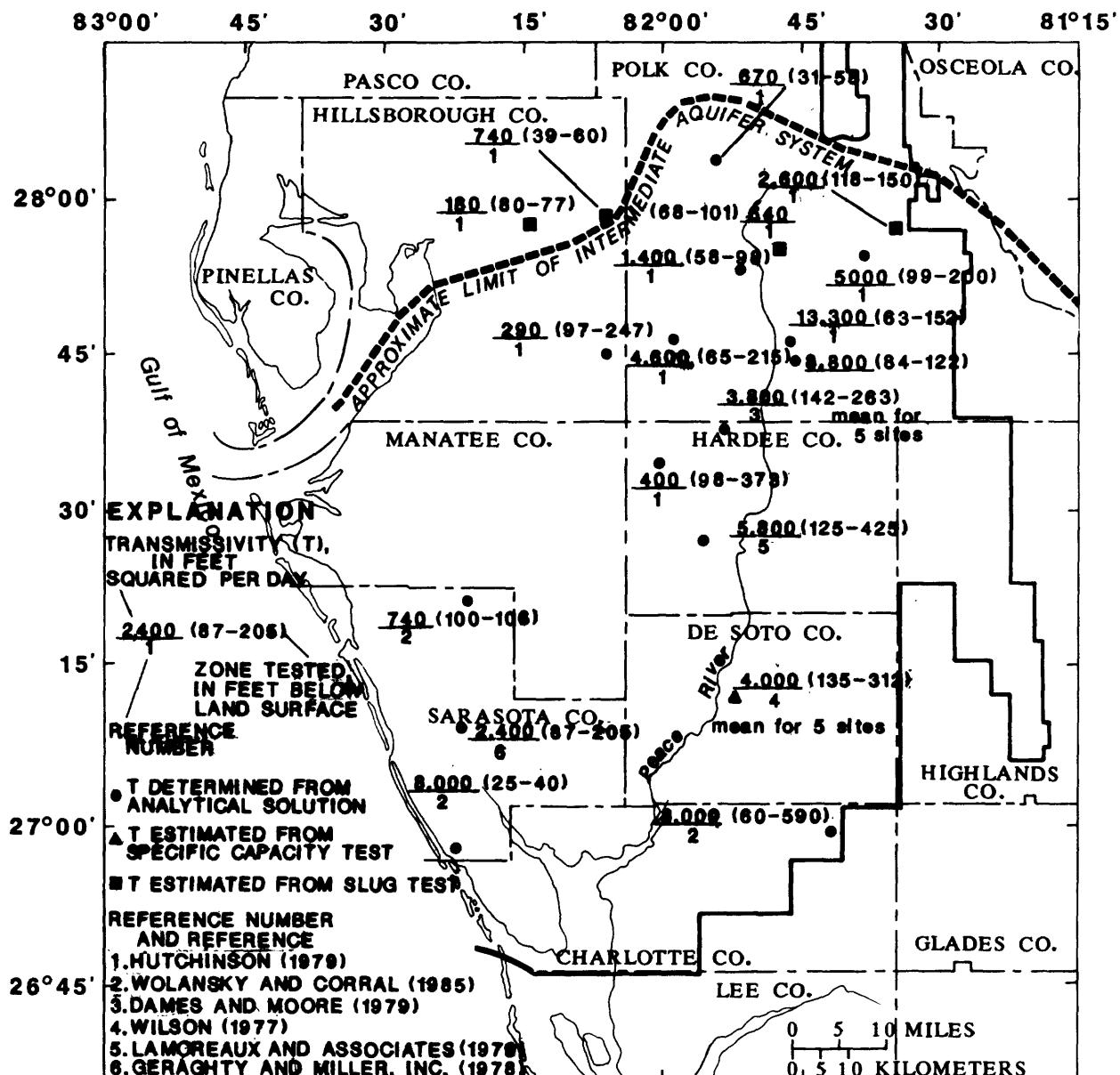


Figure 14.--Locations of aquifer-test sites showing transmissivity determinations for the permeable parts of the intermediate aquifer system.

POTENIOMETRIC SURFACE

The potentiometric surface, or hydraulic head, is an imaginary surface connecting points to which water would rise in tightly cased wells from a given point in an aquifer (Lohman, 1972). Potentiometric-surface maps of the intermediate aquifer system were constructed from water-level measurements made in 115 wells (fig. 15). Construction data and measurements for September 1985 and May 1986 are shown in appendix A. Wells were measured at the end of the normally wet season (September) and at the end of the normally dry season (May). In areas where multiple aquifers exist in the intermediate aquifer system, wells open to all aquifers in the system were selected for water-level measurements whenever possible. Thus, the potentiometric-surface maps of the intermediate aquifer system represent an average pressure surface.

The potentiometric surface of the intermediate aquifer system in September 1985 is shown in figure 16. The altitude of the potentiometric surface ranges from about 120 feet above sea level in Polk County to less than 20 feet above sea level near the coast. Lateral flow from areas of high potential to areas of low potential is generally south and west toward the coast.

The potentiometric surface of the underlying Upper Floridan aquifer in September 1985 was mapped by Barr (1985) and is shown in figure 17. Head differences between the intermediate aquifer system and the Upper Floridan aquifer in September 1985 are shown in figure 18. In the northern part of the study area, heads in the intermediate aquifer system are higher than heads in the underlying Upper Floridan aquifer. Water is transmitted downward through the confining unit and recharges the Upper Floridan aquifer. The gradient in head reverses in the southern part of the study area where the underlying Upper Floridan aquifer has a higher head than the head in the intermediate aquifer system. There, water is transmitted upward through the confining unit and recharges the intermediate aquifer system. Head differences between the intermediate aquifer system and the Upper Floridan aquifer range from more than +60 feet near the corner of Hillsborough, Manatee, Polk, and Hardee Counties to about -15 feet in western Sarasota County.

The potentiometric surface of the intermediate aquifer system is generally higher than the water level in the surficial aquifer system in the low-lying areas near the Peace River. As a result, in these areas, ground water moves upward from the intermediate aquifer system into the surficial aquifer system. The upward flow tends to depress the potentiometric surface of the intermediate aquifer system near the Peace River (fig. 16). Along reaches of the river where the Hawthorn Formation crops out, as in parts of Hardee and northern De Soto Counties, ground water may discharge by spring flow directly from the intermediate aquifer system to the river.

Figure 19 shows the potentiometric surface of the intermediate aquifer system in May 1986 near the end of the dry season when ground-water withdrawals are greatest and water levels are at their seasonal low. The altitude of the potentiometric surface ranges from about 120 feet above sea level in Polk County to less than 10 feet above sea level near the coast. The decline in the potentiometric surface from September 1985 to May 1986 ranged from about 1 to 20 feet and resulted from ground-water withdrawals. Largest declines were in south-central Polk, central Hardee, and north-central De Soto Counties. Smallest declines were in Charlotte County.

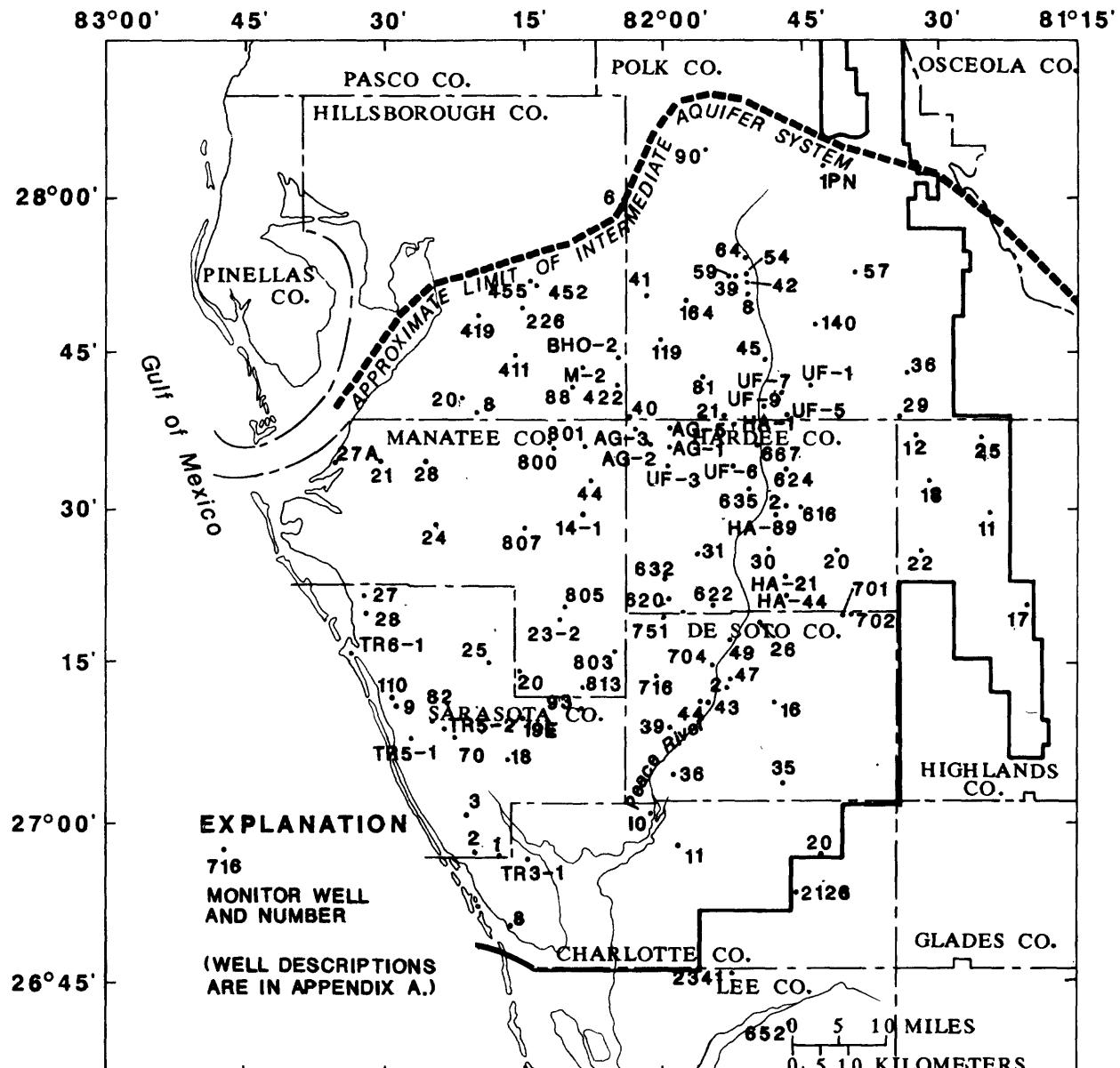


Figure 15.--Locations of wells in the intermediate aquifer system.

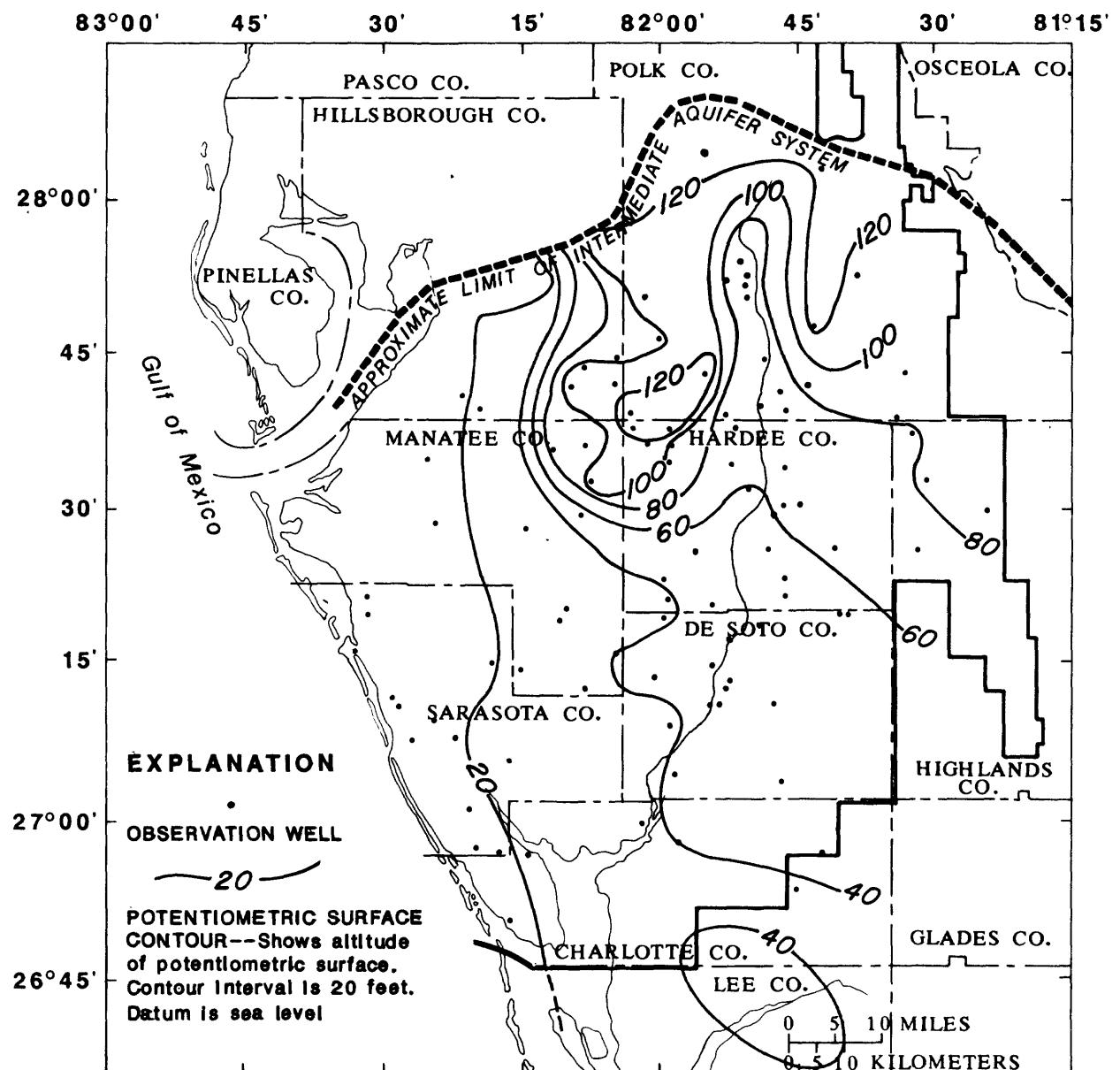


Figure 16.--Potentiometric surface of the intermediate aquifer system, September 1985.

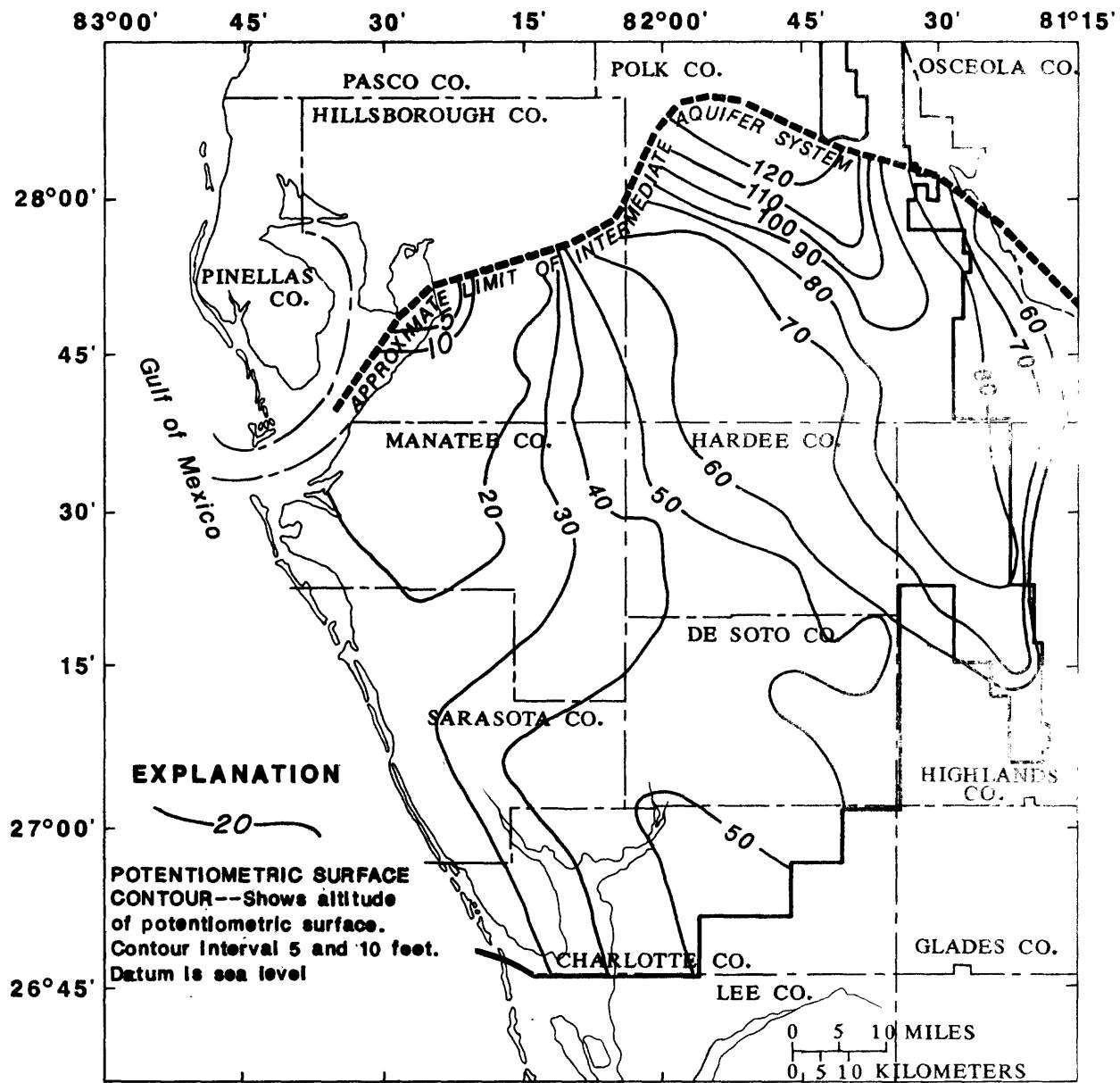


Figure 17.--Potentiometric surface of the Upper Floridan aquifer, September 1985. (Modified from Barr, 1985.)

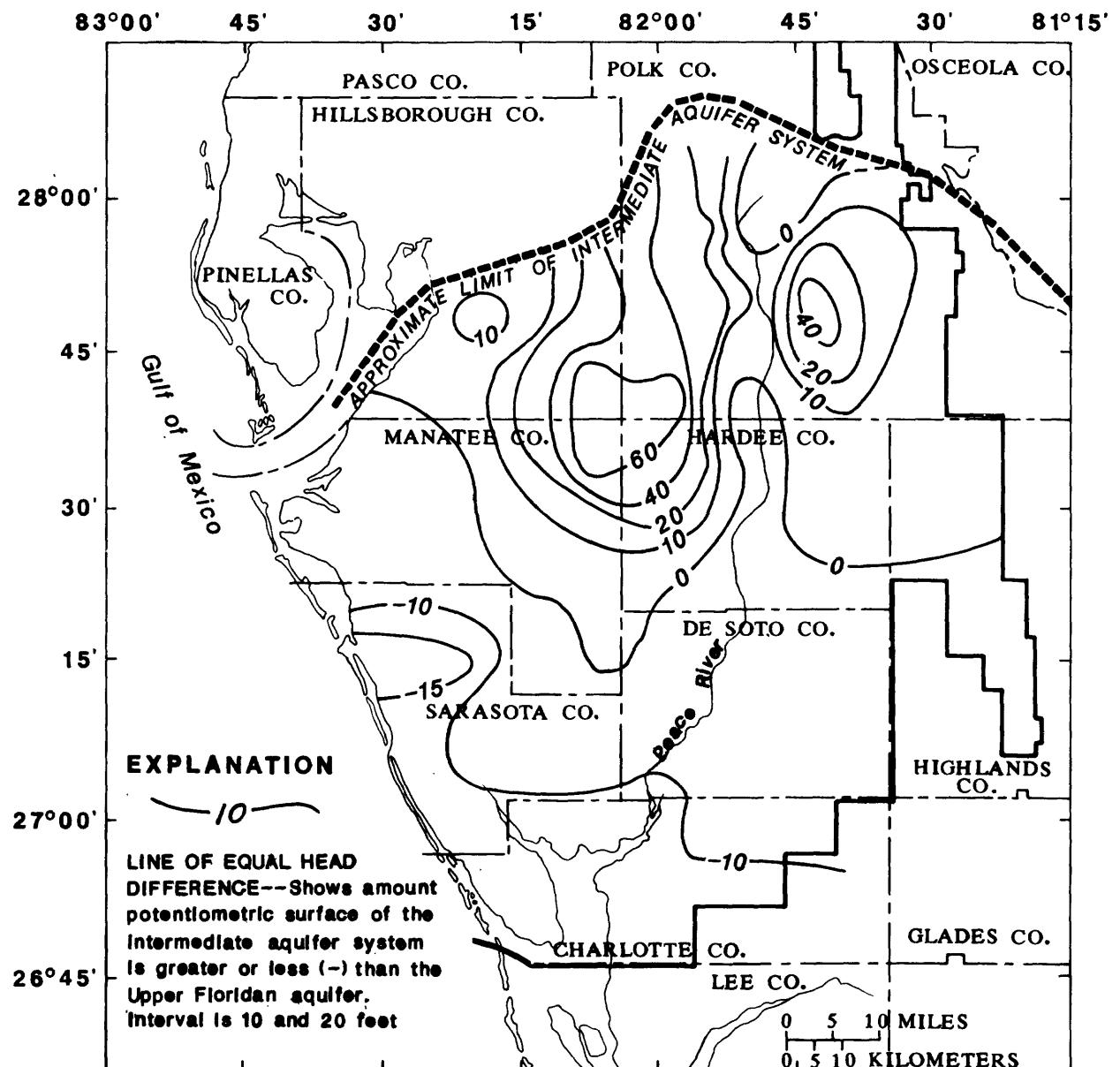


Figure 18.--Head difference between the potentiometric surfaces of the intermediate aquifer system and the underlying Upper Floridan aquifer, September 1985.

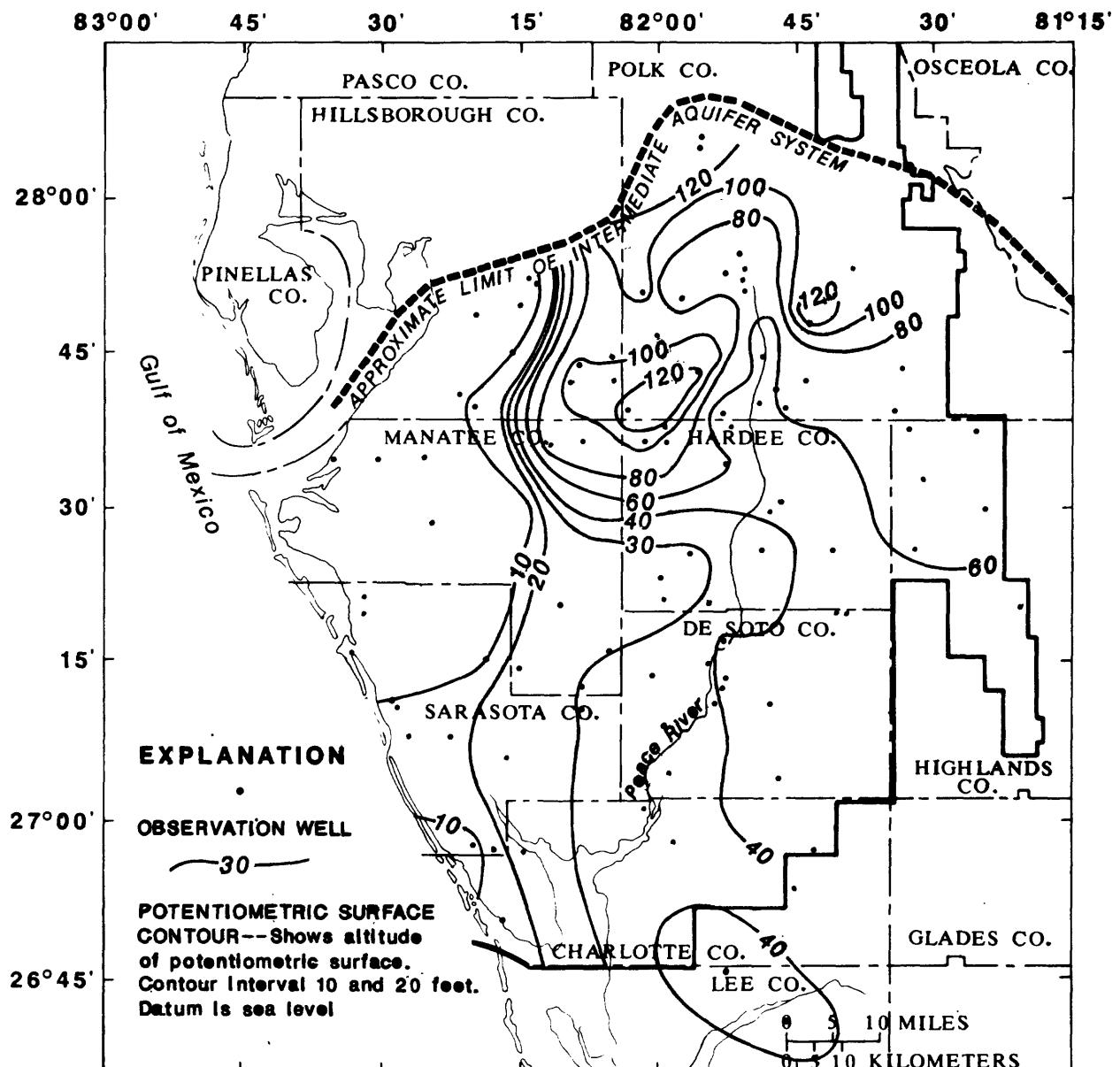


Figure 19.--Potentiometric surface of the intermediate aquifer system, May 1986.

The potentiometric surface of the Upper Floridan aquifer in May 1986 is shown in figure 20. Head differences between the two aquifers are shown in figure 21. As in September 1985, the potentiometric surface of the intermediate aquifer system in May 1986 was greater than the potentiometric surface of the underlying Upper Floridan aquifer throughout the northern part of the study area. Head differences were greater in May 1986 than in September 1985 and the area where the intermediate aquifer system heads were higher extended further south. Head differences ranged from more than +100 feet in southwestern Polk County to about -10 feet in Charlotte County.

Large head differences between the Upper Floridan aquifer and the intermediate aquifer system in May 1986 in the northern half of the study area were caused by large ground-water withdrawals from the Upper Floridan aquifer for irrigation during the dry spring season. The potentiometric surface of the intermediate aquifer system was only slightly lower in May than in September because of relatively small ground-water withdrawals from the intermediate aquifer system for irrigation during the dry spring season.

The Southwest Florida Water Management District has drilled a network of monitoring wells at ROMP sites (Regional Observation and Monitor-well Program). Locations of ROMP sites are shown in figure 22. Hydrographs of paired ROMP wells are shown in figures 23 through 31 and illustrate the head difference between the aquifer system throughout the study area. Monthly rainfall is also shown in these figures. The hydrographs show water-level responses to seasonal rainfall variations and ground-water withdrawals. Generally, water levels are highest at the end of the wet season (June through September) and lowest at the end of the dry season (April and May). The dry spring season is also the period of peak water use, and large ground-water withdrawals also contribute to the seasonal decline in water levels.

ROMP sites 57, 59, 40, and 45 in Polk County (figs. 23 through 26) and ROMP site 31 in Hardee County (fig. 27) show that the intermediate aquifer system has a potentiometric surface greater than that of the underlying Upper Floridan aquifer in the northern part of the study area. ROMP sites TR5-1 and TR5-2 in Sarasota County and TR3-1 in Charlotte County show that these gradients are reversed in the south as heads increase with depth (figs. 29 through 31).

Hydrographs at ROMP sites 45, 31, and 26 in southern Polk, central Hardee, and northern De Soto Counties show that small (1 to 4 feet) head differences and similar fluctuation patterns exist for wells in the intermediate aquifer system and wells in the Upper Floridan aquifer (figs. 25, 27, and 28). This suggests that leaky, fairly permeable confining beds allow relatively good connection between aquifers in the central part of the study area.

Hydrographs at ROMP sites 57 and 59 in central Polk County show a large head difference between aquifers (figs. 23 and 24). Water levels are 10 to 15 feet higher in the intermediate aquifer system than in the underlying Upper Floridan aquifer. This suggests that the confining beds between aquifers are relatively impermeable.

Hydrographs at ROMP site 40 in southwestern Polk County also show large head differences between aquifers (fig. 26). Water levels are 70 to 110 feet higher in the intermediate aquifer system than in the underlying Upper Floridan aquifer.

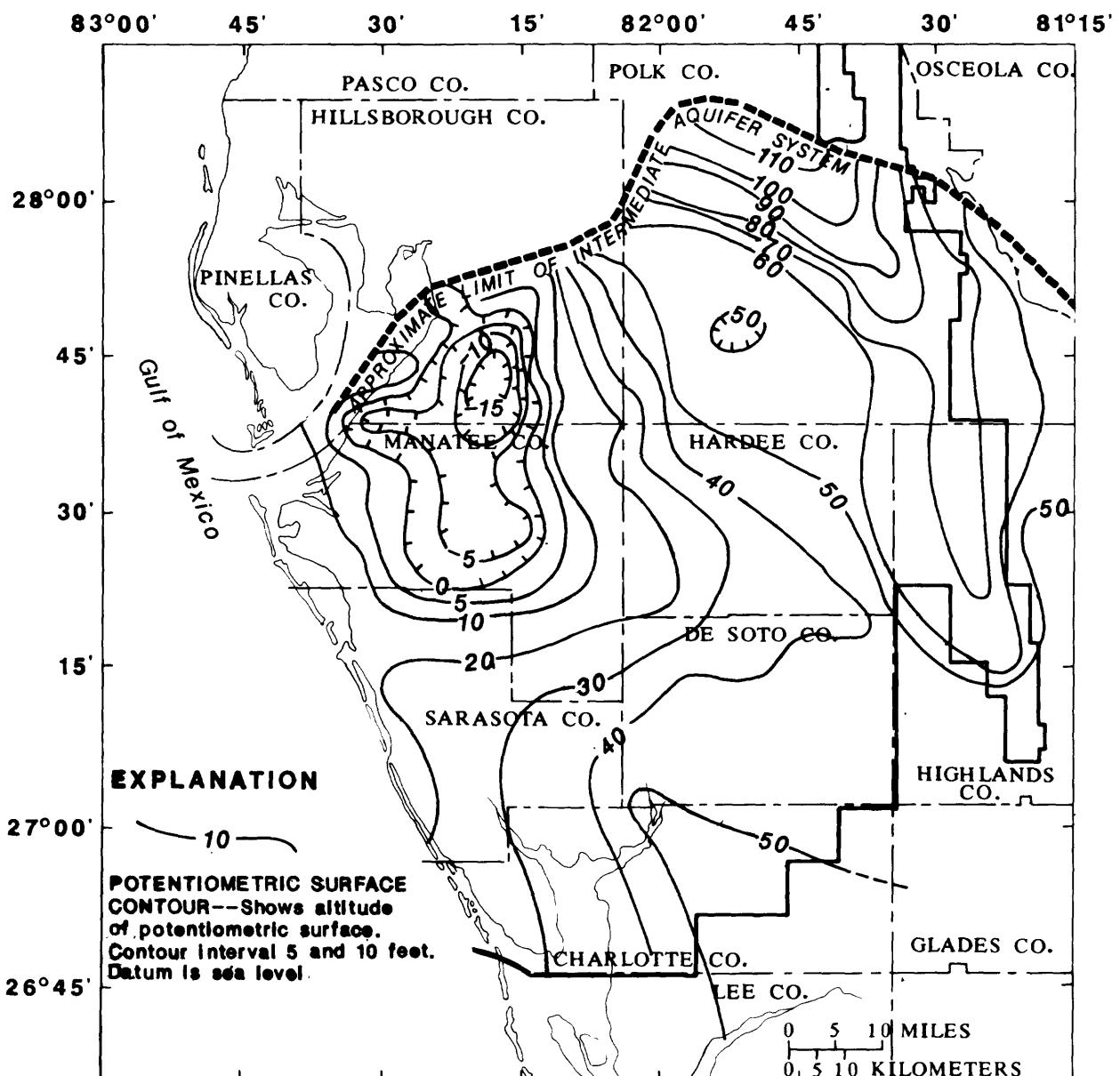


Figure 20.--Potentiometric surface of the Upper Floridan aquifer, May 1986. (Modified from Barr and Lewelling, 1986.)

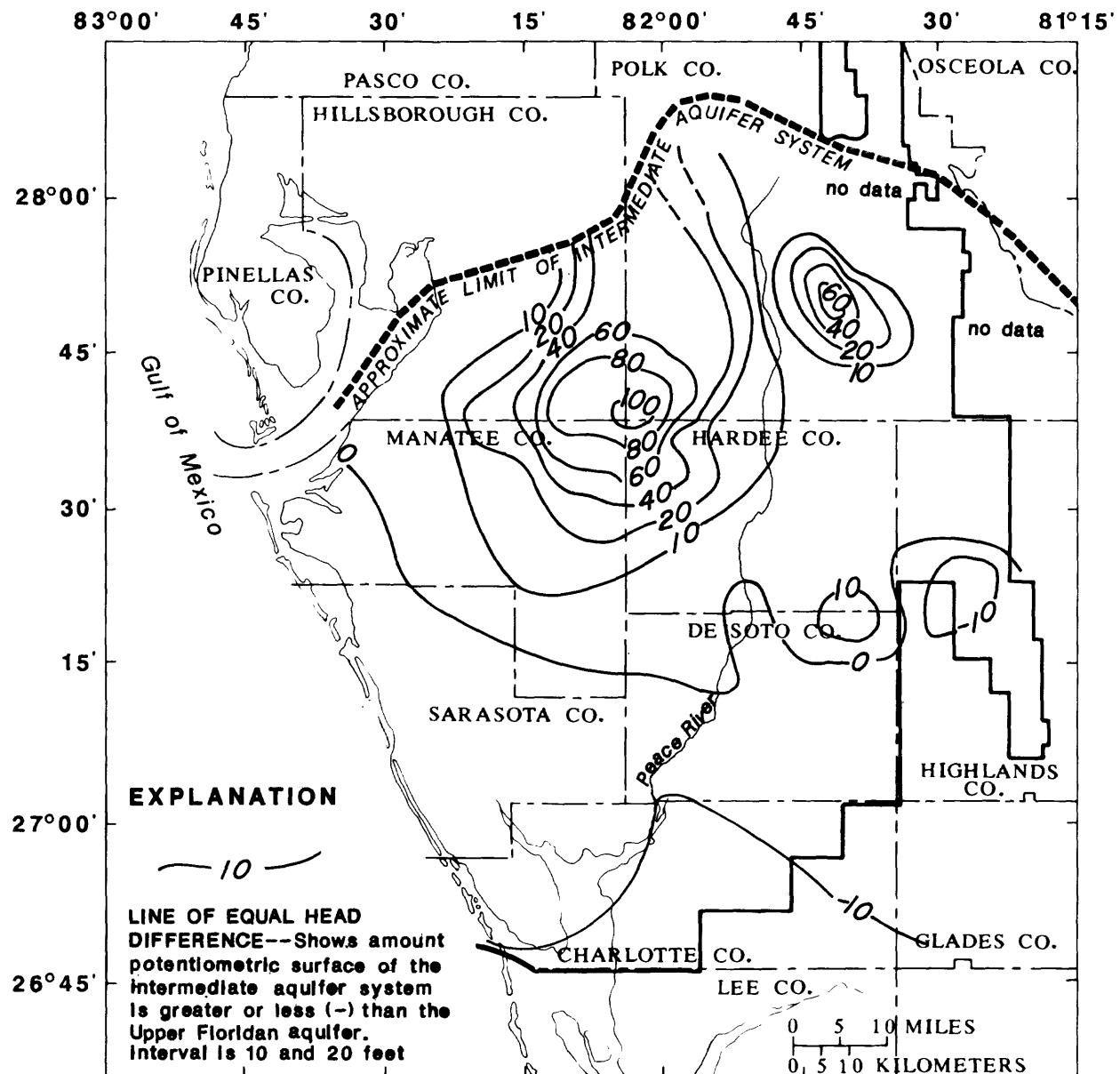


Figure 21.--Head difference between the potentiometric surfaces of the intermediate aquifer system and the underlying Upper Floridan aquifer, May 1986.

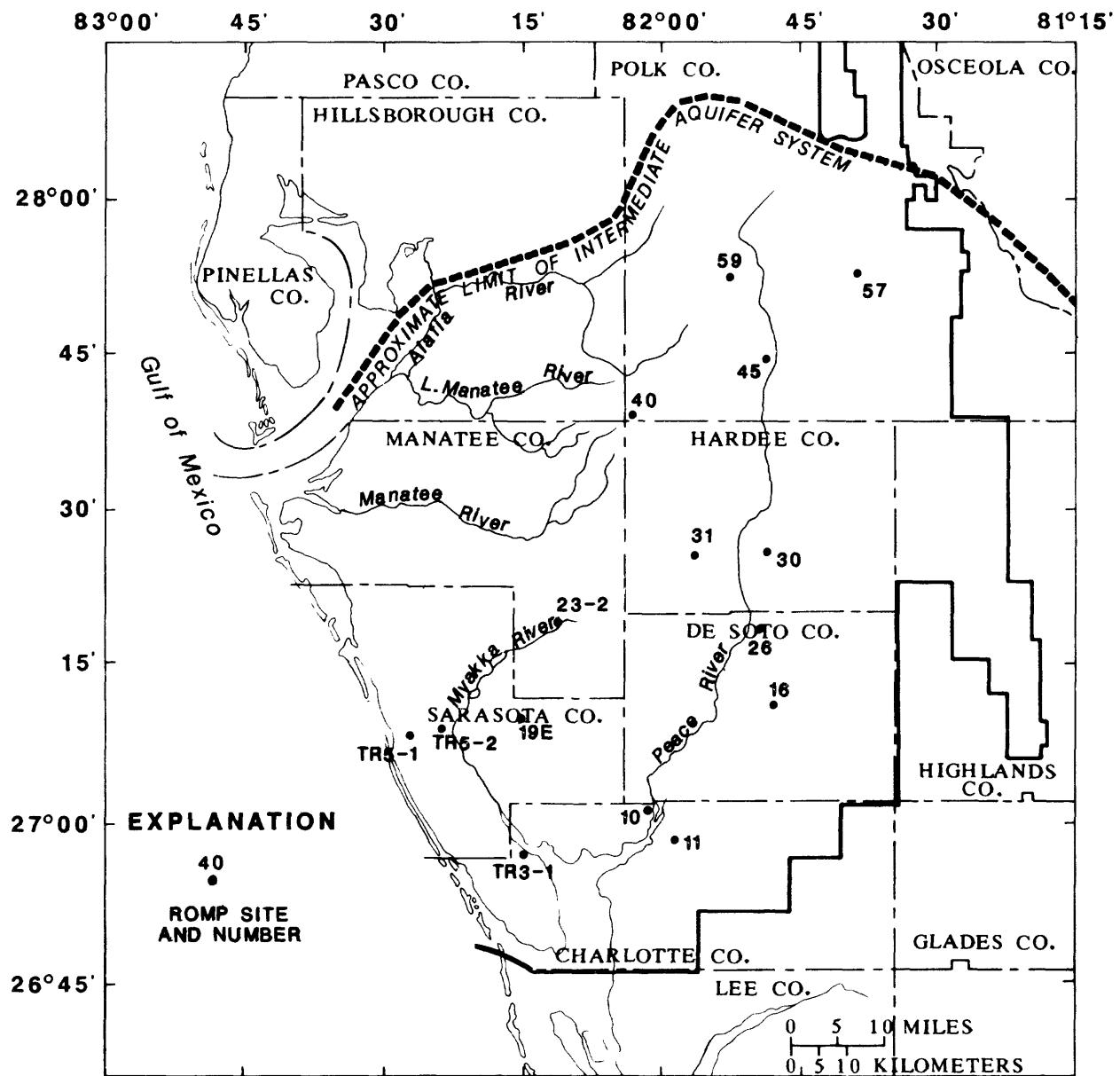


Figure 22.--Locations of Regional Observation and Monitor Well Program sites.

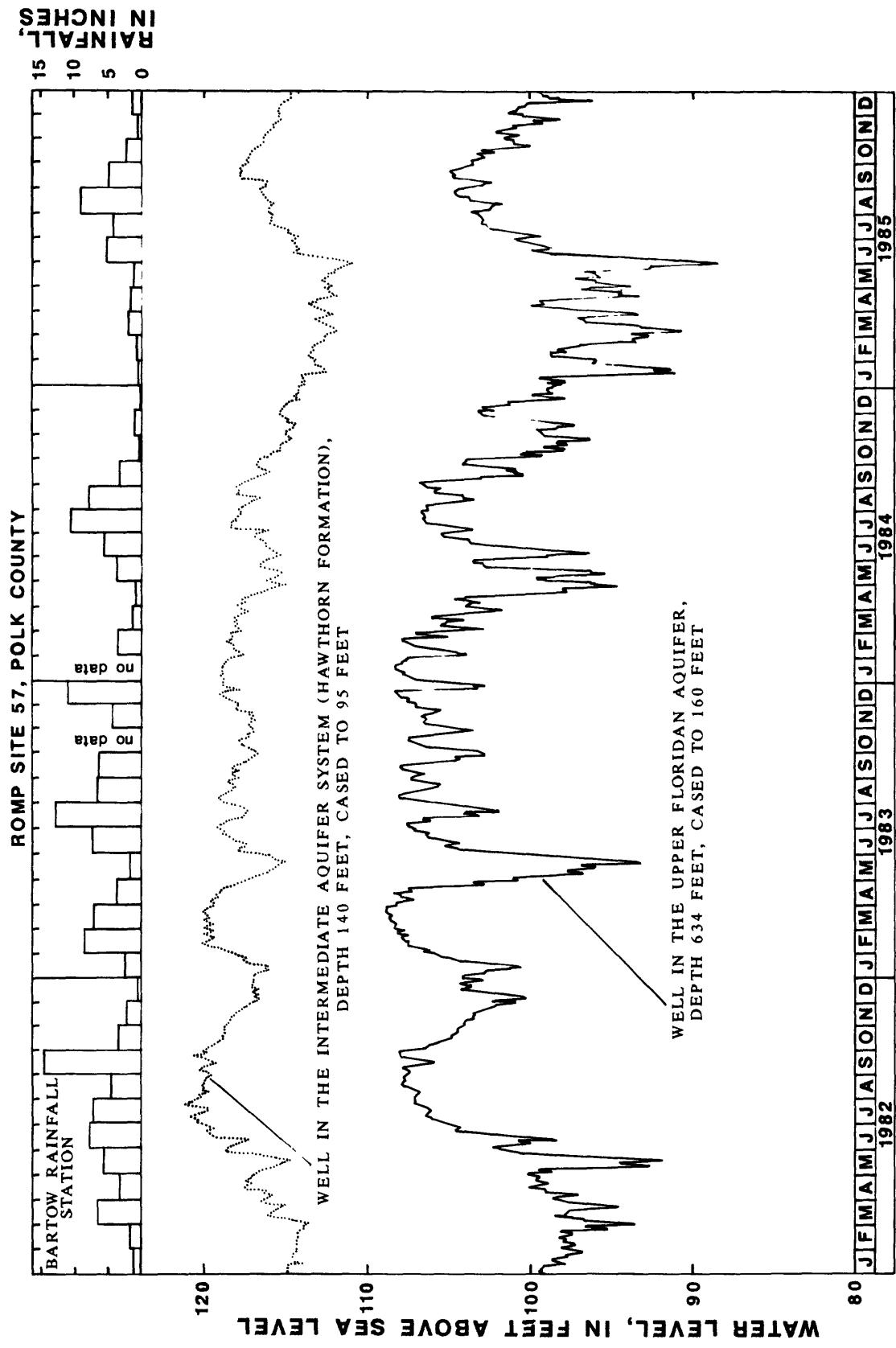


Figure 23.—Monthly rainfall at Bartow and daily maximum water levels at Regional Observation and Monitor Well Program site 57.

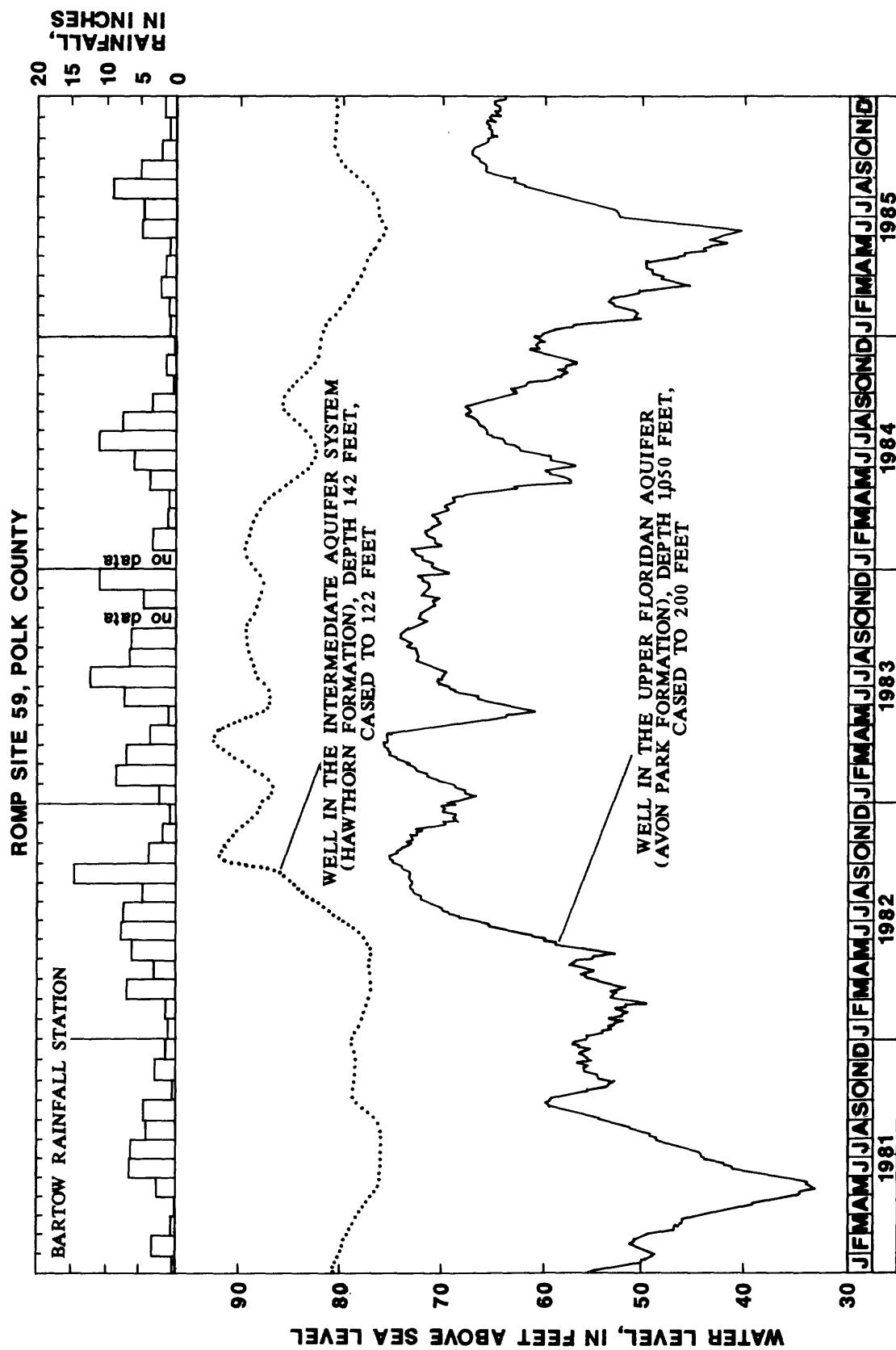


Figure 24.—Monthly rainfall at Bartow and daily maximum water levels at Regional Observation and Monitor Well Program site 59.

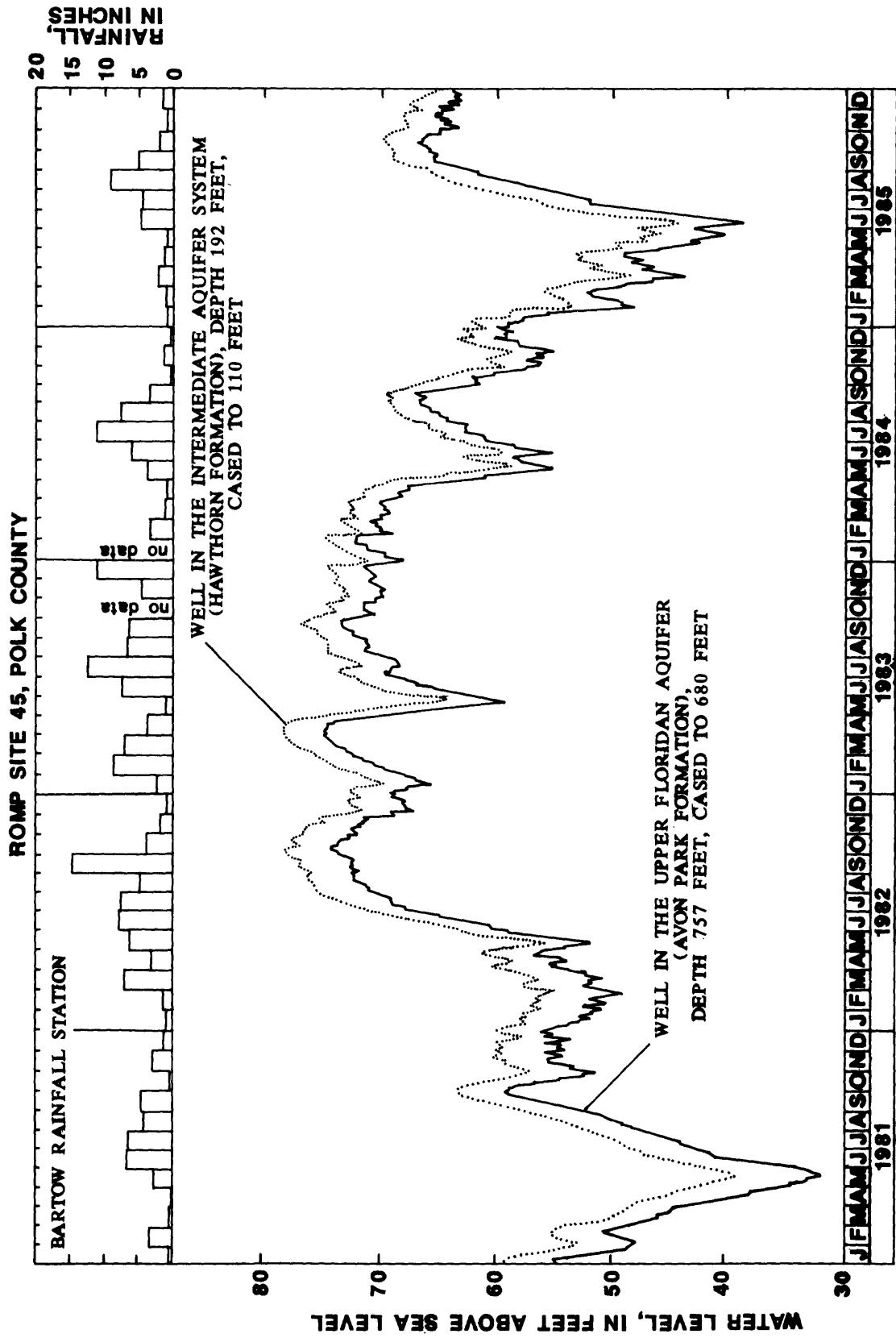


Figure 25.--Monthly rainfall at Bartow and daily maximum water levels at Regional Observation and Monitor Well Program site 45.

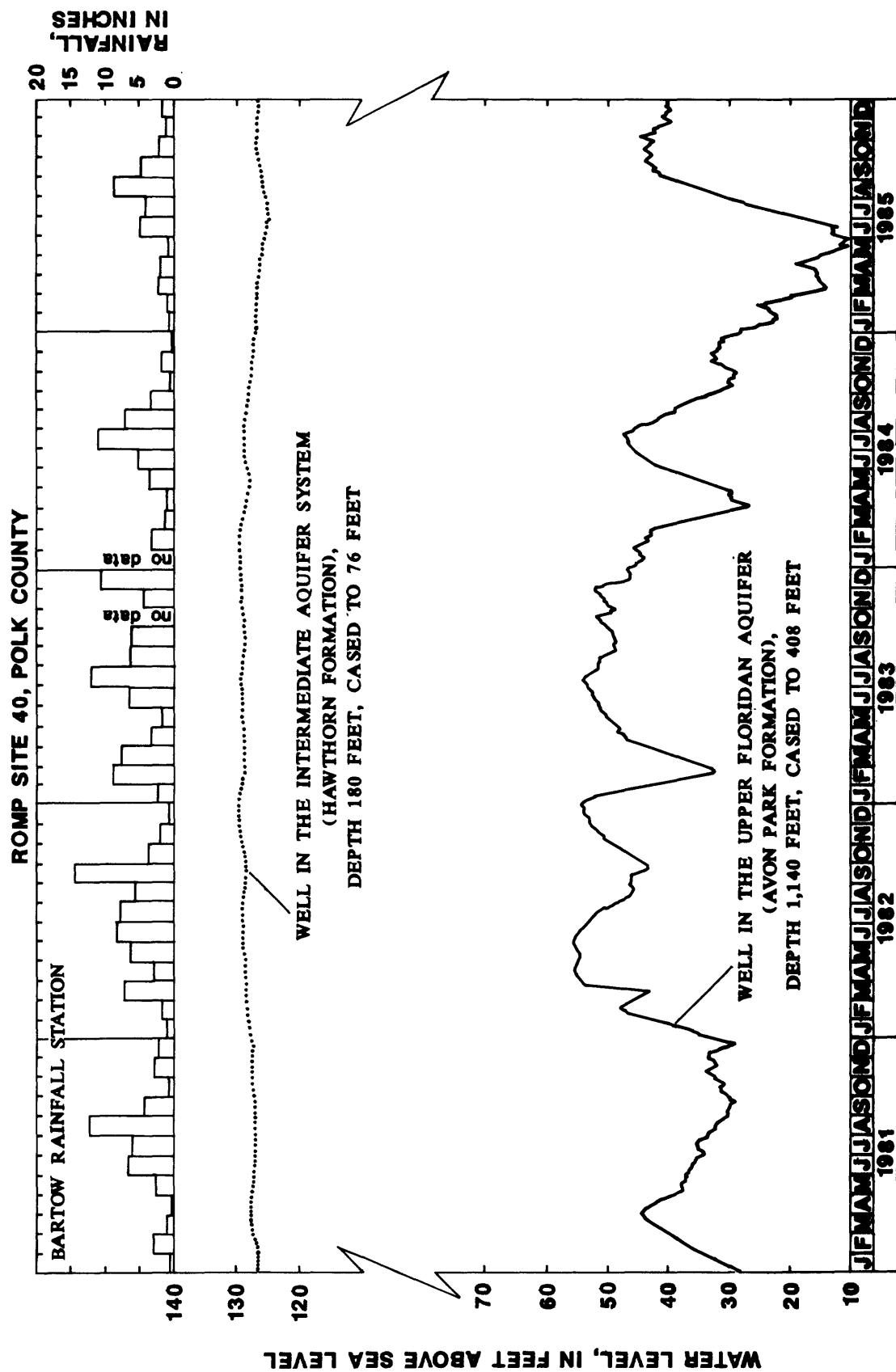


Figure 26.--Monthly rainfall at Bartow and daily maximum water levels at Regional Observation and Monitor Well Program site 40.

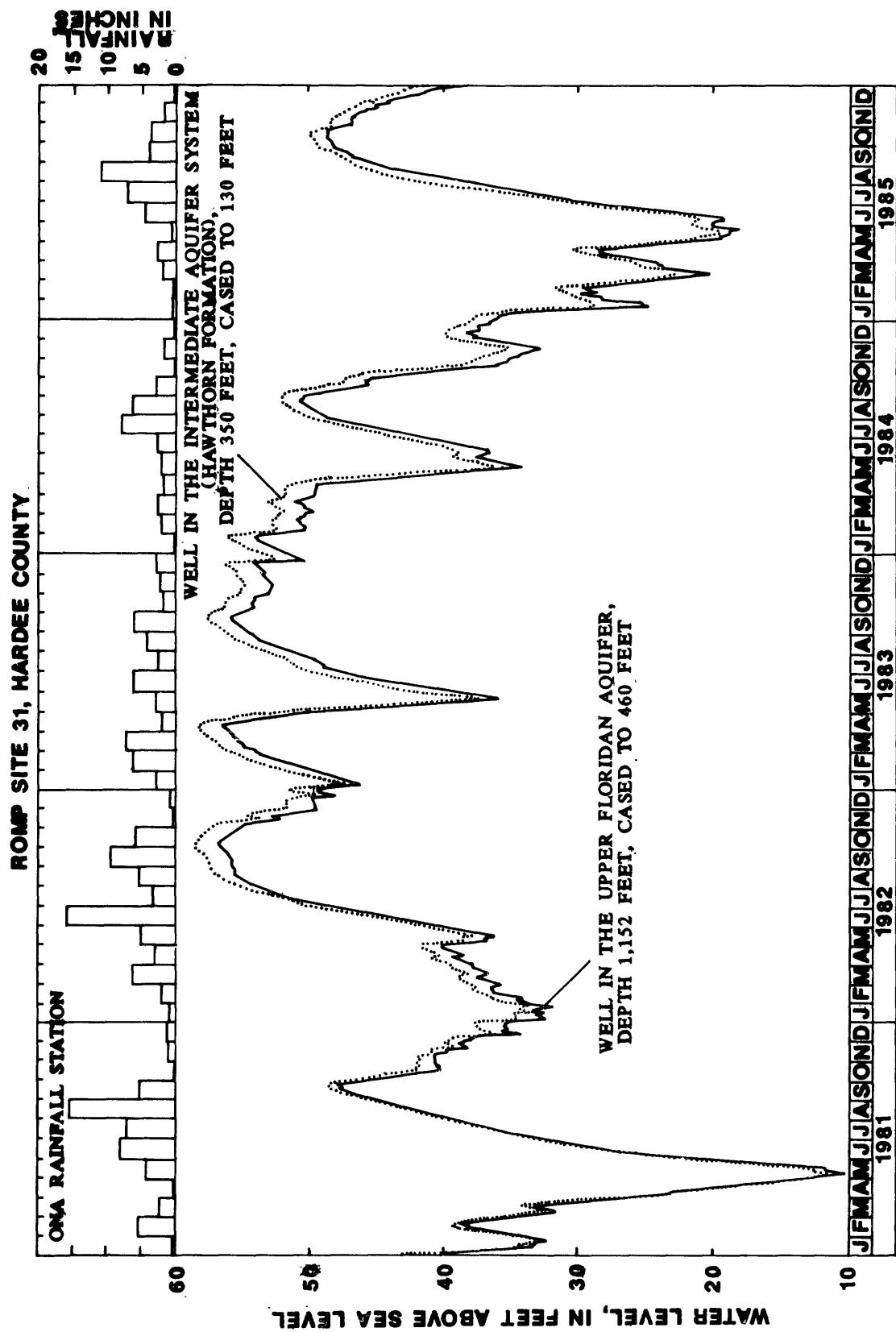


Figure 27.--Monthly rainfall at Ona and daily maximum water levels at Regional Observation and Monitor Well Program site 31.

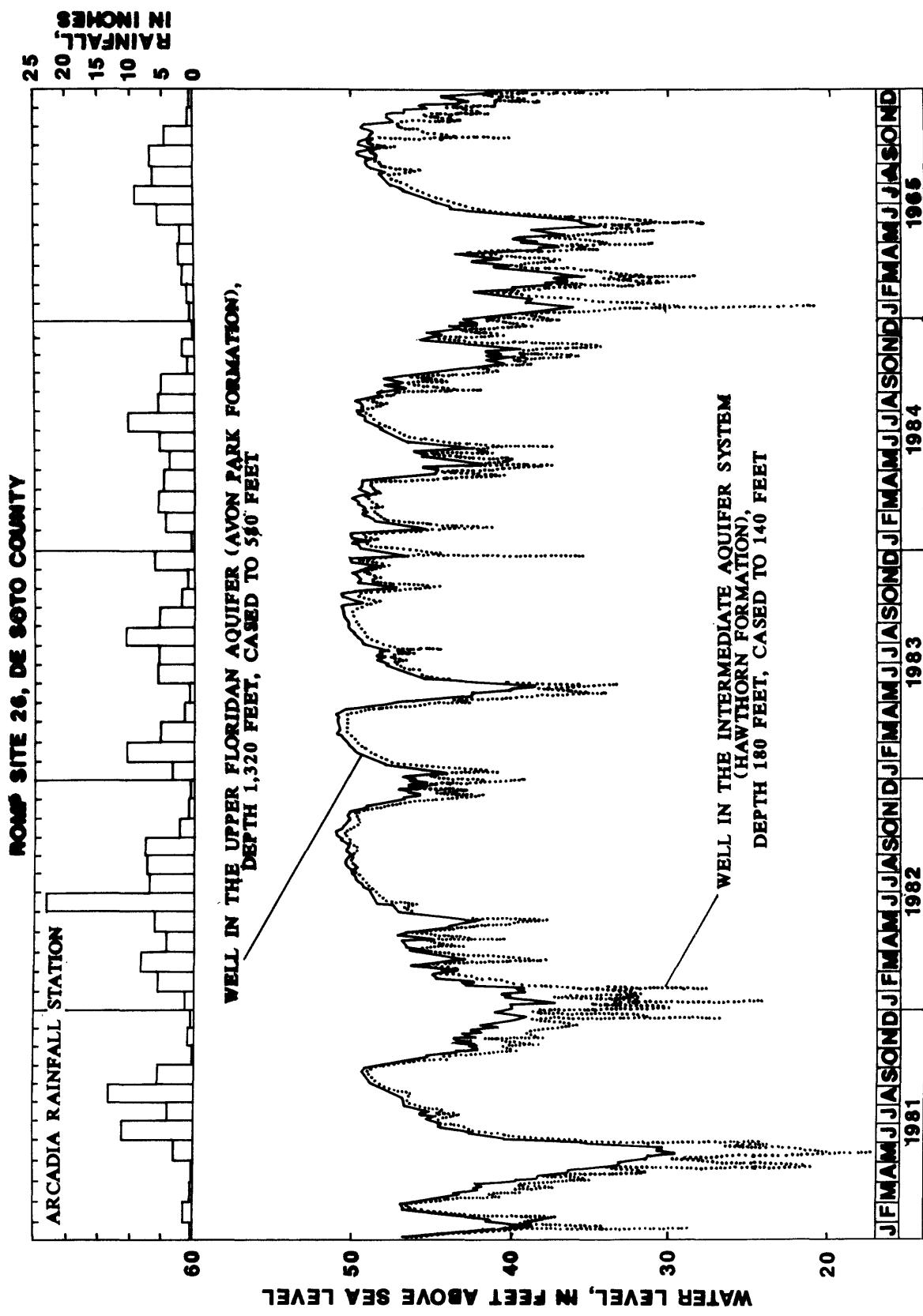


Figure 28.—Monthly rainfall at Arcadia and daily maximum water levels at Regional Observation and Monitor Well Program site 26.

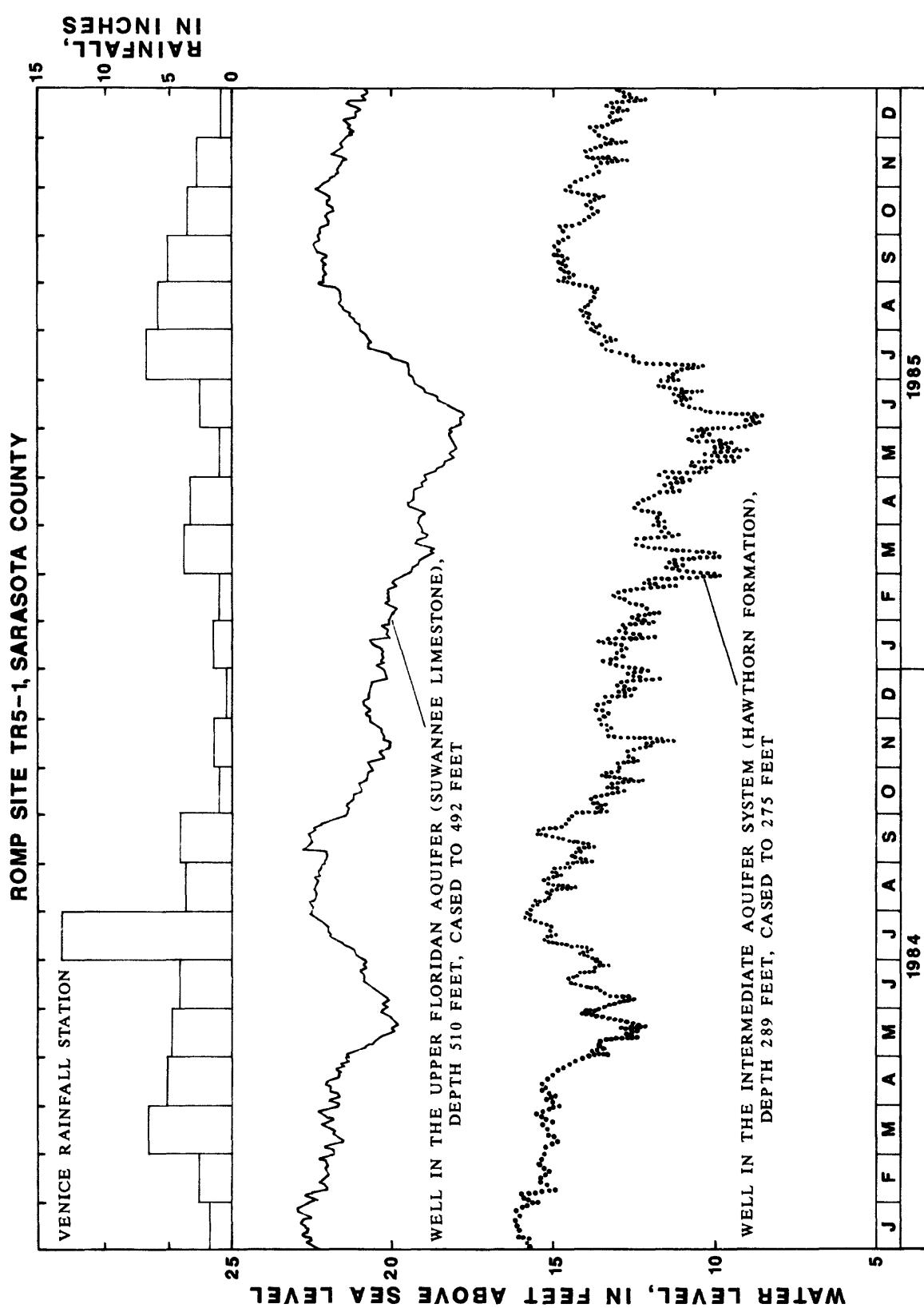


Figure 29.--Monthly rainfall at Venice and daily maximum water levels at Regional Observation and Monitor Well Program site TR5-1.

ROMP SITE TR5-2, SARASOTA COUNTY

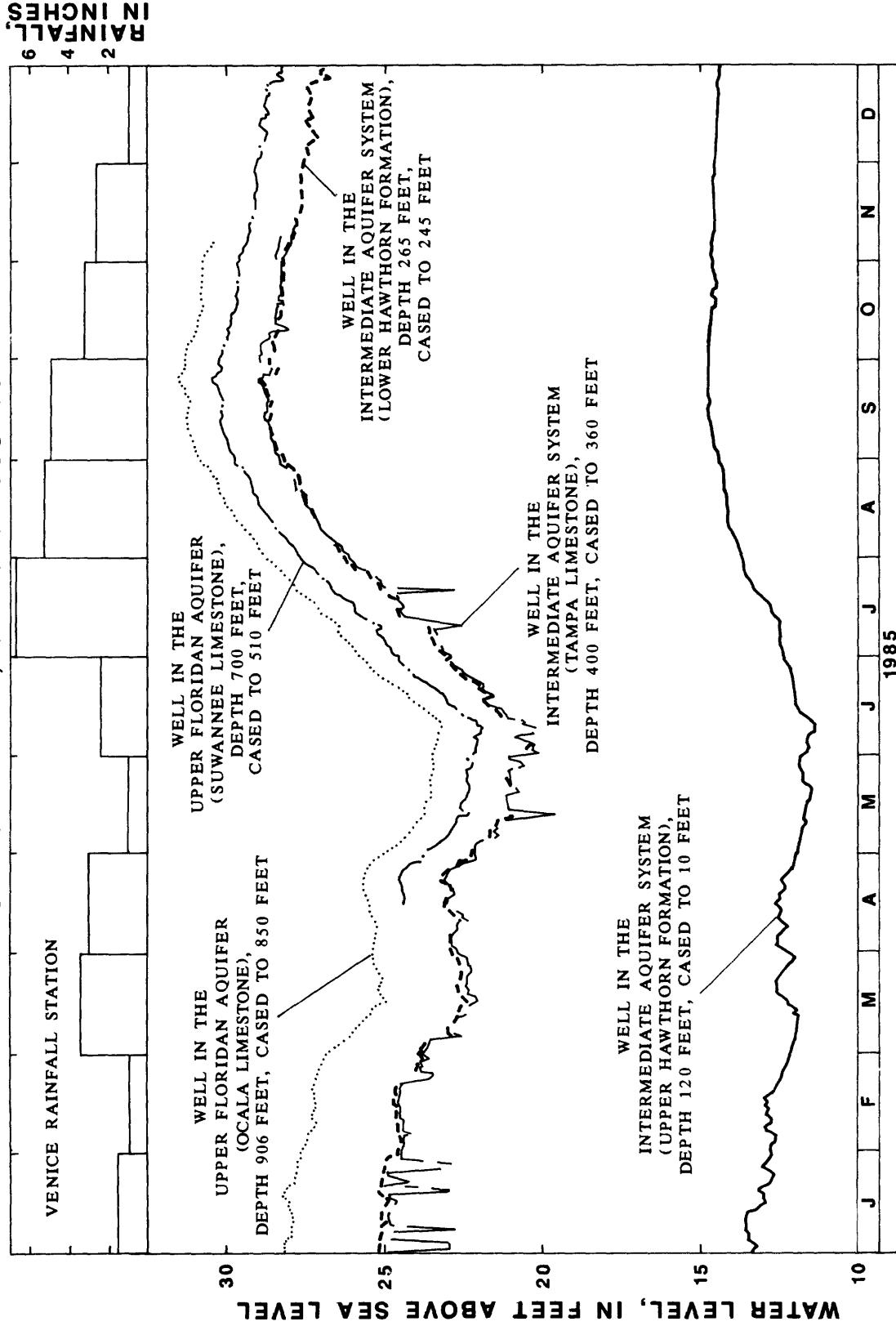


Figure 30.--Monthly rainfall at Venice and daily maximum water levels at Regional Observation and Monitor Well Program site TR5-2.

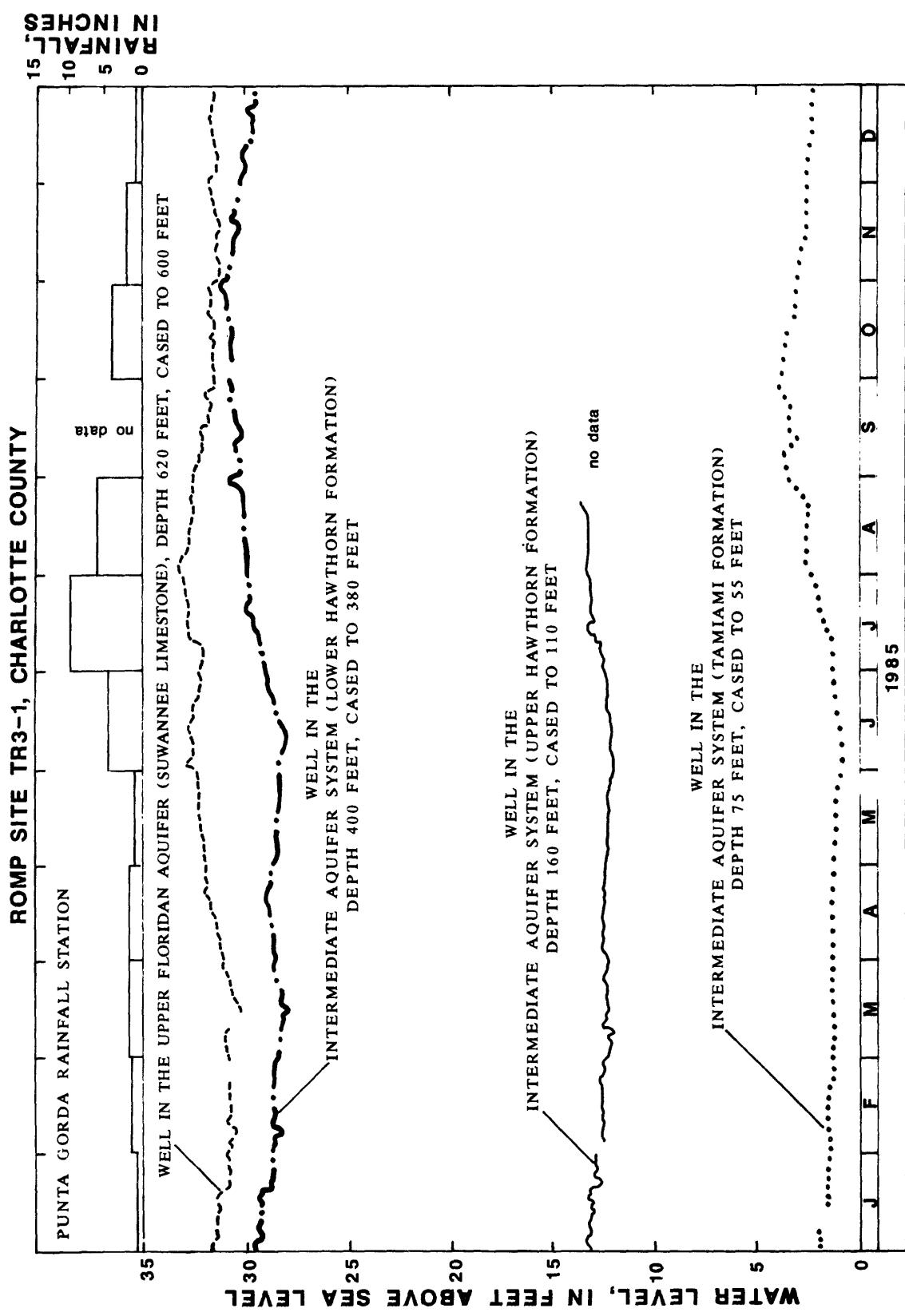


Figure 31.--Monthly rainfall at Punta Gorda and daily maximum water levels at Regional Observation and Monitor Well Program site TR3-1.

The confining beds are also relatively impermeable in the southern part of the study area where water levels are significantly lower in the intermediate aquifer system than in the Upper Floridan aquifer as shown in the hydrographs at ROMP sites TR5-1, TR5-2, and TR3-1 in Sarasota and Charlotte Counties (figs. 29 through 31). Hydrographs at ROMP sites TR5-2 and TR3-1 show water levels increasing with depth in three different zones within the intermediate aquifer system at each site.

GROUND-WATER WITHDRAWAL

Ground-water withdrawal data for the Southwest Florida Water Management District are collected cooperatively by the Southwest Florida Water Management District and the U.S. Geological Survey. A combined total of about 1,288 Mgal/d of fresh ground water was withdrawn from the surficial, intermediate, and Upper Floridan aquifers in 1985 for irrigation, public and rural supply, and industrial use (Stieglitz, 1986). Of this total, an estimated 808 Mgal/d was withdrawn in the study area. Withdrawal data are not delineated by individual aquifers.

The Upper Floridan aquifer is by far the most productive aquifer and supplies more than 10 times the amount of water pumped from either the surficial aquifer system or the intermediate aquifer system in most of the study area. However, the importance of the Upper Floridan aquifer as a source of water diminishes as the water quality in the aquifer decreases in the southern and western parts of the study area where concentrations of dissolved solids, chloride and sulfate exceed 1,000, 250, and 250 mg/L, respectively (Wolansky, 1983; p. 32). The saline water is the probable result of past marine inundations and subsequent mixing and water-rock reactions (Steinkampf, 1982, p. 1). In these areas, the intermediate aquifer system is the most important source of ground water for public supply because it has better water quality.

Following is an estimate of the amount of freshwater withdrawn from the intermediate aquifer system in 1985 in the study area and an explanation of the techniques used to make the estimate. Withdrawals outside of the Southwest Florida Water Management District boundary are not included in the estimate.

Estimates of water withdrawn from the intermediate aquifer system were based upon: (1) Southwest Florida Water Management District well construction and consumptive-use permitting files; (2) U.S. Geological Survey Ground-Water Site Inventory Files; (3) specific capacity and transmissivity data for various aquifers; and (4) data reported by previous investigators, such as Sutcliffe (1975), Wilson (1977), and Stieglitz (1986).

Well construction was the primary factor for estimating water withdrawn from the intermediate aquifer system. Depth and casing of withdrawal wells in each county were estimated from well-construction data. The depth and casing data indicated from which aquifer or aquifers the well was producing water. In areas where wells were constructed with producing zones in more than one aquifer, the ratio of the specific capacities or transmissivities of the two aquifers from the site or a nearby site was used to estimate the proportion of water withdrawn from each aquifer. Information on sources of withdrawals reported by previous investigators also was used to estimate withdrawals from the system.

An estimated 68.9 Mgal/d of water was withdrawn for all use categories in 1985 from the intermediate aquifer system in the Southwest Florida Water Management District (table 2). The largest withdrawal of ground water was for irrigation, about 38.8 Mgal/d. Of this total, 15.0 Mgal/d was withdrawn in Charlotte County. The largest withdrawal of ground water from the system for all use categories was in Sarasota County, about 18.3 Mgal/d (Stieglitz, 1986).

Table 2.--Water withdrawn from the intermediate aquifer system, 1985

County	Water withdrawn for indicated purpose, in million gallons per day					Total
	Public supply	Rural	Industrial	Irrigation		
Charlotte ¹	0.4	2.0	0.0	15.0		17.4
De Soto	.7	1.1	.1	2.0		3.9
Hardee	0	1.2	.4	3.0		4.6
Highlands ¹	0	1.0	0	3.6		4.6
Hillsborough	0	1.5	.1	.5		2.1
Manatee	0	.3	0	6.2		6.5
Polk ¹	0	4.0	4.2	3.3		11.5
Sarasota	10.0	3.1	0	5.2		18.3
Total	11.1	14.2	4.8	38.8		68.9

¹ Includes only data for parts of the county that are in the Southwest Florida Water Management District.

Public Supply

The public supply category includes all water distributed by public-supply water systems to households, industry, agriculture, and other purposes (Duerr and Sohm, 1983). A total of about 97.8 Mgal/d of ground water was withdrawn for public supply from all aquifers in the study area in 1985 (Stieglitz, 1986). Of this total, about 11.1 Mgal/d was withdrawn from the intermediate aquifer system (table 2). The largest withdrawals from the intermediate aquifer system for public supply were in Sarasota County, about 10.0 Mgal/d.

Rural Supply

The rural supply category includes all water supplied to households that are not supplied by large (withdrawing more than 100,000 gal/d) public-supply systems. This includes households that have their own water supply and households that are supplied by small public-supply systems. Well diameters generally range from 2 to 4 inches.

Ground water withdrawn for rural use from all aquifers in the study area in 1985 averaged about 29.8 Mgal/d (Stieglitz, 1986). Of this total, about 14.2 Mgal/d was withdrawn from the intermediate aquifer system (table 2). The largest rural water withdrawals were from the intermediate aquifer system, about 4 Mgal/d, and occurred in Polk County.

Industrial Supply

The industrial supply category includes water used by industries that supply their own water. Data do not include water sold to industries by public-supply systems.

Ground water withdrawn for industrial purposes from all aquifers in the study area in 1985 averaged about 159.7 Mgal/d (Stieglitz, 1986). Of this total, about 4.8 Mgal/d was withdrawn from the intermediate aquifer system (table 2). Polk County had the largest withdrawal from the intermediate aquifer system in this category, about 4.2 Mgal/d, most of which was withdrawn for phosphate mining, chemical processing, and citrus processing.

Irrigation Supply

The irrigation supply category includes water withdrawn by irrigators from private wells and does not include water supplied by public-supply systems. Irrigation water use is generally not metered and estimates of water use for irrigation are the least accurate of all water-use data. For a more complete discussion of irrigation water use see Duerr and Sohm (1983) and Stieglitz (1986).

Ground water withdrawn for irrigation from all aquifers in the study area in 1985 averaged about 521 Mgal/d (Stieglitz, 1986). Of this total, about 38.8 Mgal/d was withdrawn from the intermediate aquifer system (table 2). Irrigation withdrawals were largest in Charlotte County, 15 Mgal/d, most of which was for citrus and vegetable irrigation.

SUMMARY

The study area includes the southern part of the Southwest Florida Water Management District, an area of about 4,700 mi². The area is characterized by a low-lying coastal plain bordered by sand-covered ridges along the north and east that are more than 150 feet above sea level. The climate is warm with humid summers and mild, moderately dry winters. The average annual rainfall of five stations in southwest Florida for the period 1915 to 1976 was 53.1 inches.

Principal hydrogeologic units are the surficial aquifer system, the intermediate aquifer system, and the Floridan aquifer system. The surficial aquifer system overlies the intermediate aquifer system and consists of Holocene and Pleistocene age deposits containing sand, clayey sand, shell, shelly marl, and some phosphorite. Thickness ranges from about 25 feet near the coast and low-lying areas to about 250 feet in Highlands County. Transmissivity ranges from about 1,100 to about 8,000 ft²/d.

The intermediate aquifer system includes all water-bearing units and confining material between the overlying surficial aquifer system and the underlying Floridan aquifer system. The intermediate aquifer system consists of three hydrogeologic units: (1) a sandy clay and clayey sand confining unit in the lower part that lies directly on the Floridan aquifer system; (2) an aquifer system that consists of one, two, or three water-bearing units (aquifers) composed primarily of sand and carbonate rocks; and (3) a sandy clay, clay, and marl confining unit in the upper part that separates the water-bearing unit in the intermediate aquifer system from the overlying surficial aquifer system.

The top of the intermediate aquifer system ranges from more than 100 feet below sea level in Highlands County to more than 100 feet above sea level in Polk County. The thickness of the intermediate aquifer system ranges from less than 100 feet in central Hillsborough and northern Polk Counties to more than 800 feet in southern Charlotte County.

Total transmissivity of aquifers within the intermediate aquifer system ranges from less than $200 \text{ ft}^2/\text{d}$ where the permeable deposits are thin to about $13,000 \text{ ft}^2/\text{d}$ in the carbonate section near the Peace River. Leakage of the confining beds within the intermediate aquifer system ranges from 1×10^{-7} to $4 \times 10^{-4} (\text{ft}/\text{d})/\text{ft}$.

The underlying Floridan aquifer system is defined as a vertically continuous sequence of carbonate rocks of generally high permeability that are of Tertiary age, that are hydraulically connected to each other in varying degrees, and whose permeability is several orders of magnitude greater than that of the rocks that bound the system above and below.

The Floridan aquifer system consists of the Upper and Lower Floridan aquifers separated by a "tight" middle confining unit. The middle unit and Lower Floridan aquifer generally contain saltwater. In most reports on the hydrology of southwest Florida, the term "Floridan aquifer" has been applied to the water-bearing rocks herein referred to as the Upper Floridan aquifer. It is the major source of fresh ground water for most of southwest Florida. Transmissivity of the Upper Floridan aquifer in the study area ranges from about $30,000 \text{ ft}^2/\text{d}$ at the gulf coast where the freshwater zone is thin to about $400,000 \text{ ft}^2/\text{d}$ in eastern De Soto and Hardee Counties.

A comparison of the potentiometric surface of the intermediate aquifer system and the underlying Upper Floridan aquifer shows that in the northern part of the study area, heads in the intermediate aquifer system are higher than heads in the underlying Upper Floridan aquifer. Water is transmitted downward through the confining unit and recharges the Upper Floridan aquifer. The gradient in head reverses in the southern part of the study area where the underlying Upper Floridan aquifer has a higher head than the head in the intermediate aquifer system. There, water is transmitted upward through the confining unit and recharges the intermediate aquifer system.

The potentiometric surface of the intermediate aquifer system is generally higher than the water level in the surficial aquifer system in the low-lying areas near the Peace River. As a result, in these areas, ground water moves upward from the intermediate aquifer system into the surficial aquifer system.

The Upper Floridan aquifer is by far the most productive aquifer and supplies more than 10 times the amount of water pumped from either the surficial aquifer system or the intermediate aquifer system in most of the study area. However, the importance of the Upper Floridan aquifer as a source of water diminishes as the water quality in the aquifer decreases in the southern and western parts of the study area where concentrations of dissolved solids, chloride and sulfate exceed 1,000, 250, and 250 mg/L, respectively. In these areas the importance of the intermediate aquifer system as a source of water increases.

In 1985, an estimated 808 Mgal/d of freshwater was withdrawn in the study area from the surficial and intermediate aquifer systems and Upper Floridan aquifer for irrigation, public and rural supply, and industrial use. Of this total, an estimated 68.9 Mgal/d was withdrawn from the intermediate aquifer system. Sarasota County used the most water from the system for all use categories, about 18.3 Mgal/d.

SELECTED REFERENCES

- Barr, G.L., 1985, Potentiometric surface of the Upper Floridan aquifer, west-central Florida, September 1985: U.S. Geological Survey Open-File Report 85-679, 1 sheet.
- Barr, G.L., and Lewelling, B.R., 1986, Potentiometric surface of the Upper Floridan aquifer, west-central Florida, May 1986: U.S. Geological Survey Open-File Report 86-409, 1 sheet.
- Bergendahl, M.H., 1956, Stratigraphy of parts of De Soto and Hardee Counties, Florida: U.S. Geological Survey Bulletin 1030-B, p. 65-97.
- Bishop, E.W., 1956, Geology and ground-water resources of Highlands County, Florida: Florida Geological Survey Report of Investigations 15, 115 p.
- 1960, Freshwater resources of Sarasota County, Florida: Sarasota County Commission Engineering Report, 35 p.
- Brown, D.P., 1982, Water resources and data network assessment of the Manasota basin, Manatee and Sarasota Counties, Florida: U.S. Geological Survey Water-Resources Investigations 82-37, 80 p.
- 1983, Water resources of Manatee County, Florida: U.S. Geological Survey Water-Resources Investigations 81-74, 112 p.
- Buono, Anthony, and Rutledge, A.T., 1979, Configuration of the top of the Floridan aquifer, Southwest Florida Water Management District and adjacent areas: U.S. Geological Survey Water-Resources Investigations Open-File Report 78-34, 1 sheet.
- Buono, Anthony, Spechler, R.M., Barr, G.L., and Wolansky, R.M., 1979, Generalized thickness of the confining bed overlying the Floridan aquifer, Southwest Florida Water Management District: U.S. Geological Survey Water-Resources Investigations Open-File Report 79-1171, 1 sheet.
- Corral, M.A., Jr., and Wolansky, R.M., 1984, Generalized thickness and configuration of the top of the intermediate aquifer, west-central Florida: U.S. Geological Survey Water-Resources Investigations Report 84-4018, 1 sheet.
- Dames and Moore, 1979, Consumptive use permit application supporting report, Little Payne Phosphate Mine, Polk and Hardee Counties, Florida, for USS Agri-Chemicals: Consultant's report in files of the Southwest Florida Water Management District.

- Duerr, A.D., and Sohm, J.E., 1983, Estimated water use in southwest Florida, 1981, and summary of annual water use, 1970, 1975, and 1977-81: U.S. Geological Survey Open-File Report 83-45, 75 p.
- Duerr, A.D., and Wolansky, R.M., 1986, Hydrogeology of the surficial and intermediate aquifers of central Sarasota County, Florida: U.S. Geological Survey Water-Resources Investigations Report 86-4068, 48 p.
- Eppert, H.C., 1966, Stratigraphy of the upper Miocene deposits in Sarasota County, Florida: Tulane Studies in Geology, v. 4, no. 2, p. 49-61.
- Florida Department of Environmental Regulation, 1982, Public drinking water systems: Chapter 17-22 in Florida Administrative Code.
- Franks, B.J. (ed.), 1982, Principal aquifers in Florida: U.S. Geological Survey Water-Resources Investigations 82-255, 4 sheets.
- Geraghty and Miller, Inc., 1974, A reconnaissance appraisal of the water potential of the upper artesian aquifer at the Verna well field, Sarasota, Florida: City of Sarasota Engineering Report, 35 p.
- 1975a, Ground water resources of the Verna well field, Sarasota, Florida: City of Sarasota Engineering Report, 30 p.
- 1975b, Connector well feasibility study on the Phillips Petroleum Company property, De Soto and Manatee Counties, Florida: Consultant's report for Phillips Petroleum Company in files of the Southwest Florida Water Management District, 25 p.
- 1978, Hydrologic effects of developing 15 MGD of water from the Floridan aquifer in the Pine Level area, De Soto and Manatee Counties, Florida: Consultant's report for Phillips Petroleum Company in files of the Southwest Florida Water Management District, 200 p.
- 1980, Hydrogeologic investigation of the upper aquifer systems in the Venice Gardens area, phase I and II: Venice Gardens Utility Corporation Engineering Report, 34 p.
- 1981, MacArthur Tract hydrologic and water-supply investigation, phase I: Southwest Florida Water Management District Engineering Report, 45 p.
- 1982, Ground-water development potential, Snover Waterway, Sarasota County, Florida: Consultant's report for General Development Utilities, incorporated in files of the Southwest Florida Water Management District.
- Heath, R.C., and Smith, P.C., 1954, Ground-water resources of Pinellas County, Florida: Florida Geological Survey Report of Investigations 12, 139 p.
- Hutchinson, C.B., 1978, Appraisal of shallow ground-water resources and management alternatives in the upper Peace and eastern Alafia River basins, Florida: U.S. Geological Survey Water-Resources Investigations 77-124, 57 p.
- 1982, Assessment of the interconnection between Tampa Bay and the Floridan aquifer, Florida: U.S. Geological Survey Water-Resources Investigations 82-54, 60 p.
- 1984, Hydrogeology of the Verna well-field area and management alternatives for improving yield and quality of water, Sarasota County, Florida: U.S. Geological Survey Water-Resources Investigations Report 84-4006, 53 p.
- Joyner, B.F., and Sutcliffe, H., Jr., 1976, Water resources of the Myakka River basin area, southwest Florida: U.S. Geological Survey Water-Resources Investigations 76-58, 87 p.
- Kaufman, M.I., and Dion, N.P., 1968, Ground-water resources data of Charlotte, De Soto, and Hardee Counties, Florida: Florida Bureau of Geology Information Circular 53, 22 p.
- LaMoreaux, P.E., and Associates, 1979, Supporting report for consumptive use permit, Farmland Industries, Inc., Hardee County property: Consultant's report in files of the Southwest Florida Water Management District, 98 p.

- Lindh and Associates, 1969, Test well study--proposed new well field, raw water supply, Englewood Water District: Englewood Water District Engineering Report, 40 p.
- Lohman, S.W., 1972, Ground-water hydraulics: U.S. Geological Survey Professional Paper 708, 70 p.
- Menke, C.G., Meredith, E.W., and Wetterhall, W.S., 1961, Water resources of Hillsborough County, Florida: Florida Geological Survey Report of Investigations 20, 101 p.
- 1964, Water resources records of Hillsborough County, Florida: Florida Geological Survey Information Circular 44, 95 p.
- Miller, J.A., 1982a, Thickness of the Tertiary limestone aquifer system, southeastern United States: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-1124, 1 sheet.
- 1982b, Geology and configuration of the base of the Tertiary limestone aquifer system, southeastern United States: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-1176, 1 sheet.
- 1982c, Geology and configuration of the top of the Tertiary limestone aquifer system, southeastern United States: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-1178, 1 sheet.
- 1982d, Thickness of the upper permeable zone of the Tertiary limestone aquifer system, southeastern United States: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-1179, 1 sheet.
- 1982e, Configuration of the base of the upper permeable zone of the Tertiary limestone aquifer system, southeastern United States: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-1177, 1 sheet.
- 1986, Hydrogeologic framework of the Floridan aquifer system in Florida and in parts of Georgia, South Carolina, and Alabama: U.S. Geological Survey Professional Paper 1403-B, 91 p.
- Palmer, C.E., and Bone, L.P., 1977, Some aspects of rainfall deficits in west-central Florida, 1961-1976: Southwest Florida Water Management District Hydrometeorological Report No. 1, 19 p.
- Parker, G.G., Ferguson, G.E., Love, S.K., and others, 1955, Water resources of southeastern Florida, with special reference to geology and ground water of the Miami area: U.S. Geological Survey Water-Supply Paper 1255, 965 p.
- Peek, H.M., 1958, Ground-water resources of Manatee County, Florida: Florida Geological Survey Report of Investigations 18, 99 p.
- 1959a, The artesian water of the Ruskin area of Hillsborough County, Florida: Florida Geological Survey Report of Investigations 21, 96 p.
- 1959b, Record of wells in the Ruskin area of Hillsborough County, Florida: Florida Geological Survey Information Circular 22, 85 p.
- Reynolds, Smith, and Hills, Inc., 1974, Engineering and financial analysis of water supply alternatives: Venice Gardens Utility Corporation Engineering Report, 34 p.
- 1975, Phase I report, ground water development program, Venice Gardens, Florida: Venice Gardens Utility Corporation Engineering Report, 40 p.
- Robertson, A.F., 1973, Hydrologic conditions in the Lakeland Ridge area of Polk County, Florida: Florida Bureau of Geology Report of Investigations 64, 54 p.
- Robertson, A.F., and Mills, L.R., 1974, Ground-water withdrawals in the upper Peace and upper Alafia River basins, Florida: Florida Bureau of Geology Map Series 67.

- Robertson, A.F., Mills, L.R., and Parsons, D.C., 1978, Ground water withdrawn for municipal, industrial, and irrigation use in the upper Peace and Alafia River basins, west-central Florida, 1970-74: U.S. Geological Survey Open-File Report 78-29, 59 p.
- Russell and Axon, Inc., 1965, Water supply facilities, city of Venice, Florida: City of Venice Engineering Report, 38 p.
- Ryder, P.D., 1982, Digital model of predevelopment flow in the Tertiary limestone (Floridan) aquifer system in west-central Florida: U.S. Geological Survey Water-Resources Investigations 81-64, 61 p.
- 1985, Hydrology of the Floridan aquifer system in west-central Florida: U.S. Geological Survey Open-File Report 84-611, 92 p.
- Scott, T.M., and MacGill, P.L., 1981, The Hawthorn Formation of central Florida: Florida Bureau of Geology Report of Investigations 91, 107 p.
- Sinclair, W.C., Stewart, J.W., Knutilla, R.L., Gilboy, A.E., and Miller, R.L., 1985, Types, features, and occurrence of sinkholes in the karst of west-central Florida: U.S. Geological Survey Water-Resources Investigations Report 85-4126, 81 p.
- Smally, Wellford and Nalvin, Inc., 1963, Water supplies of Sarasota County: Sarasota County Engineering Report, 122 p.
- 1977, Manasota literature assessment study: Sarasota County Engineering Report, 120 p.
- Smith and Gillespie, Inc., 1960, Interim report on ground-water studies for Sarasota, Florida: City of Sarasota Engineering Report, 20 p.
- 1975, Ground water resources available for raw water supply facilities, water works system - city of Sarasota, Florida: City of Sarasota Engineering Report, 25 p.
- Southeastern Geological Society, 1986, Hydrogeological units of Florida: Florida Geological Survey Special Publication 28, 9 p.
- Sproul, C.R., Boggess, D.H., and Woodard, H.J., 1972, Saline-water intrusion from deep artesian sources in the McGregor Isles area of Lee County, Florida: Florida Bureau of Geology Information Circular 75, 30 p.
- Steinkampf, W.C., 1982, Origins and distribution of saline ground waters in the Floridan aquifer in coastal southwest Florida: U.S. Geological Survey Water-Resources Investigations Report 82-4052, 34 p.
- Stewart, H.G., Jr., 1963, Records of wells and other water-resources data in Polk County, Florida: Florida Geological Survey Information Circular 38, 144 p.
- 1966, Ground-water resources of Polk County, Florida: Florida Geological Survey Report of Investigations 44, 170 p.
- Stewart, J.W., Goetz, C.L., and Mills, L.R., 1978, Hydrogeologic factors affecting the availability and quality of ground water in the Temple Terrace area, Hillsborough County, Florida: U.S. Geological Survey Water-Resources Investigations 78-4, 38 p.
- Stieglitz, E.H., 1986, Estimated water use in the Southwest Florida Water Management District, 1985: Southwest Florida Water Management District Report, 53 p.
- Stringfield, V.T., 1933a, Ground-water resources of Sarasota County, Florida: Florida Geological Survey, in 23rd-24th Annual Report, p. 131-194.
- 1933b, Exploration of artesian wells in Sarasota County, Florida: Florida Geological Survey, in 23rd-24th Annual Report, p. 195-227.
- 1936, Artesian water in the Florida peninsula: U.S. Geological Survey Water-Supply Paper 773-C, p. 115-195.
- 1966, Artesian water in Tertiary limestone in the southeastern states: U.S. Geological Survey Professional Paper 517, 226 p.

- Sutcliffe, Horace, Jr., 1975, Appraisal of the water resources of Charlotte County, Florida: Florida Bureau of Geology Report of Investigations 78, 53 p.
- Sutcliffe, Horace, Jr., and Joyner, B.F., 1968, Test well exploration in the Myakka River basin area, Florida: Florida Geological Survey Information Circular 56, 61 p.
- Sutcliffe, Horace, Jr., and Thompson, T.H., 1983, Occurrence and use of ground water in the Venice-Englewood area, Sarasota and Charlotte Counties, Florida: U.S. Geological Survey Open-File Report 82-700, 59 p.
- Wells, S.W., 1969, Water resources survey, Port Charlotte, Florida: General Development Utilities, Inc., Engineering Report, 30 p.
- White, W.A., 1970, The geomorphology of the Florida peninsula: Florida Bureau of Geology Bulletin 51, 164 p.
- William F. Guyton and Associates, 1976, Hydraulics and water quality: Consultant's report prepared for Swift Agricultural Chemicals Corporation in files of the Southwest Florida Water Management District.
- Wilson, W.E., 1977, Ground-water resources of De Soto and Hardee Counties, Florida: Florida Bureau of Geology Report of Investigations 82, 102 p.
- 1982, Estimated effects of projected ground-water withdrawals on movement of the saltwater front in the Floridan aquifer, 1976-2000, west-central Florida: U.S. Geological Survey Water-Supply Paper 2189, 24 p.
- Wolansky, R.M., 1983, Hydrogeology of the Sarasota-Port Charlotte area, Florida: U.S. Geological Survey Water-Resources Investigations Report 82-4089, 48 p.
- Wolansky, R.M., Barr, G.L., and Spechler, R.M., 1979, Generalized configuration of the bottom of the Floridan aquifer, Southwest Florida Water Management District: U.S. Geological Survey Water-Resources Investigations Open-File Report 79-1490, 1 sheet.
- 1980, Configuration of the top of the highly permeable dolomite zone of the Floridan aquifer, Southwest Florida Water Management District: U.S. Geological Survey Water-Resources Investigations Open-File Report 80-433, 1 sheet.
- Wolansky, R.M., and Corral, M.A., Jr., 1985, Aquifer tests in west-central Florida, 1952-76: U.S. Geological Survey Water-Resources Investigations Report 84-4044, 127 p.
- Wolansky, R.M., Spechler, R.M., and Buono, Anthony, 1979, Generalized thickness of the surficial deposits above the confining bed overlying the Floridan aquifer, Southwest Florida Water Management District: U.S. Geological Survey Water-Resources Investigations Open-File Report 79-1071, 1 sheet.

APPENDIX A: Records of Monitor Wells in the
 [Well locations are shown in figure 14. Water-level

Well No.	Identification No.	County	Owner or name
8	265017082153701	Charlotte	U.S. Geological Survey no. 3
2126	265321081442601	Charlotte	Babcock
TR3-1	265638082130704	Charlotte	ROMP TR3-1 mid-Hawthorn
20	265656081414701	Charlotte	Tropical Rivers Grove 1
11	265837081561101	Charlotte	ROMP 11 Hawthorn
10	270152082002803	Charlotte	ROMP 10 Hawthorn
35	270339081464401	De Soto	Nichols Ranch (FBG D-39)
36	270417081575601	De Soto	G. V. Russel (FBG D-307)
39	270858081582201	De Soto	Nunez
43	271109081541901	De Soto	Minute Maid (FBG D-68)
44	271113081543301	De Soto	Minute Maid (FBG D-69)
16	271115081462702	De Soto	ROMP 16 Hawthorn
2	271308081522601	De Soto	Arcadia well 2 at tank
47	271332081520901	De Soto	City of Arcadia
16	271407082000401	De Soto	Hollingsworth
704	271517081542201	De Soto	Bartcher 704
49	271623081520101	De Soto	Camp Chanyahtah (Girls)
26	271757081493003	De Soto	ROMP 26 Hawthorn
751	272014081595701	De Soto	Hollingsworth 751
702	272015081392701	De Soto	Amoco 2 (oil test well)

Intermediate Aquifer System in Southwest Florida

altitude in feet above or below (-) sea level]

Well use	Well depth (feet)	Casing depth (feet)	Casing diameter (inches)	Land-surface altitude (feet)	Date	Water-level altitude (feet)
Observation	413	346	4	4	9-20-85 5-15-86	16.4 15.0
Unused	404	42	4	38	9-17-85 5-16-86	36.4 35.3
Observation	270	250	10	7.11	9-10-85 5-14-86	30.00 27.80
Irrigation	490	65	8	52	9-17-85 5-16-86	49.2 45.7
Observation	335	220	4	13.30	10-01-85 5-14-86	39.87 37.80
Observation	270	110	4	20	10-04-85 5-14-86	36.2 34.5
Unknown	377	--	6	44	9-13-85 5-16-86	48.1 44.9
Irrigation	411	70	8	35	9-12-85 5-15-86	44.0 39.2
Irrigation	428	63	6	21	9-12-85 5-15-86	35.1 35.5
Irrigation	329	90	8	50	9-13-85 5-15-86	50.0 34.9
Irrigation	384	99	6	54	9-13-85	49.5
Observation	340	300	6	60.00	10-03-85 5-15-86	50.87 41.64
Unused	372	263	8	29.33	10-02-85 5-16-86	48.86 43.36
Irrigation	311	80	6	42	9-12-85 5-15-86	43.5 41.8
Unknown	430	60	4	49	9-12-85 5-15-86	44.6 36.9
Unknown	320	130	8	59	9-13-85 5-15-86	47.4 34.2
Unused	192	43	3	15	9-13-85 5-15-86	46.0 42.4
Observation	180	140	8	75.84	9-11-85 5-15-86	48.37 35.08
Irrigation	430	144	-	81	9-12-85	37.9
Unknown	312	--	8	94	9-16-85 5-12-86	58.6 51.7

Well No.	Identification No.	County	Owner or name
701	272015081392901	De Soto	Amoco 1 (leased)
622	272038081530701	Hardee	Limestone Land Company (622)
620	272108081582601	Hardee	Hollingsworth (620)
HA-44	272233081443801	Hardee	HA-44
HA-21	272430081450501	Hardee	HA-21
632	272433081591801	Hardee	Whaley (632)
31	272714081545902	Hardee	ROMP 31 Hawthorn
20	272715081401601	Hardee	Wilbur Robertson
30	272728081474702	Hardee	ROMP 30 Tampa
HA-89	273108081461301	Hardee	W. D. Bond (603)
616	273145081433601	Hardee	Richardson (616)
2	273156081450401	Hardee	Rowell Deep (731-145-1)
635	273245081500001	Hardee	First Baptist Church
UF-3	273423081582901	Hardee	C. F. Industries
UF-6	273427081513401	Hardee	C. F. Industries
624	273435081444001	Hardee	Henderson (624)
AG-1	273650081574001	Hardee	Agrico 1
AG-2	273709081593501	Hardee	Agrico 2
667	273714081503401	Hardee	Paynes Creek Historical Site (667)
AG-3	273820082012101	Hardee	Agrico 3
HA-1	273828081515802	Hardee	Agri Chem HA-1
AG-5	273843081573001	Hardee	Agrico 5
17	272012081190201	Highlands	Jesse Sinkikakis
22	272652081311501	Highlands	Prairie Oaks Golf Club
11	273054081234701	Highlands	John McCulloch

Well use	Well depth (feet)	Casing depth (feet)	Casing diameter (inches)	Land-surface altitude (feet)	Date	Water-level altitude (feet)
Irrigation	284	145	-	94	9-16-85 5-12-86	56.1 50.2
Irrigation	235	126	4	73	9-17-85 5-12-86	45.8 29.7
Irrigation	335	146	6	79	9-17-85 5-12-86	38.6 19.8
Irrigation	300	--	8	62	9-13-85	50.2
Unused	364	--	6	65	9-13-85 5-13-86	52.4 45.2
Unused	159	--	4	67	9-17-85 5-12-86	43.1 28.0
Observation	350	130	6	78.41	9-11-85 5-15-86	47.71 29.20
Domestic	343	103	6	75	9-16-85 5-13-86	63.3 47.7
Observation	316	280	8	66.73	9-11-85 5-15-86	51.42 36.97
Unused	229	--	6	92	9-13-85 5-13-86	60.1 42.3
Irrigation	327	120	6	93	9-16-85	66.5
Observation	267	39	6	98.14	9-11-85 5-12-86	60.72 41.46
Unknown	245	130	4	123	9-16-85	56.8
Observation	375	91	10	117.6	9-12-85	95.8
Observation	385	84	8	117.5	9-12-85 5-14-86	72.3 61.1
Irrigation	293	105	6	110	9-13-85	67.4
Observation	125	--	6	113.5	9-12-85 5-14-86	91.7 86.5
Observation	125	63	4	132.5	9-10-85 5-14-86	107.2 106.0
Public supply	130	119	-	62	9-12-85 5-13-86	60.0 50.0
Observation	125	75	4	132	9-10-85	126.8
Observation	260	195	4	96.4	9-05-85 5-30-86	59.6 43.8
Observation	125	59	4	131.5	9-10-85 5-14-86	126.7 125.2
Domestic	190	--	3	42	5-14-86	47.0
Public supply	239	231	4	116	10-24-85 5-14-86	77.6 66.3
Domestic	370	160	4	111	10-24-85 5-14-86	62.6 82.6

Well No.	Identification No.	County	Owner or name
18	273353081294201	Highlands	Floyd DeVane
25	273704081245501	Highlands	Robert Richards
12	273725081305301	Highlands	Dr. Pena (Dwane Koppa)
8	273915082191201	Hillsborough	Saffold
20	274044082205101	Hillsborough	Department of Transportation
88	274214082084401	Hillsborough	Fort Lonesome
422	274218082035701	Hillsborough	Barber
M-2	274400082070901	Hillsborough	Brewster M-2 Hawthorn
411	274440082144201	Hillsborough	Ruth
BHO-2	274446082035401	Hillsborough	Amax Hawthorn
419	274857082195401	Hillsborough	Riverview Hawthorn
226	274947082145401	Hillsborough	Camp Dorothy Thomas 226
452	275156082131501	Hillsborough	Johnny Todd
455	275205082134801	Hillsborough	Ralph Clark
504	275617082223801	Hillsborough	G. W. Scott
6	275917082043601	Hillsborough	Amax Plant City AEM-6
12	280006082061601	Hillsborough	Amax Plant City AEM-12
L-652	264101081443001	Lee	Lower Hawthorn
L-2341	264517081513201	Lee	Lower Hawthorn
813	271228082072101	Manatee	Amax (513)

Well use	Well depth (feet)	Casing depth (feet)	Casing diameter (inches)	Land-surface altitude (feet)	Date	Water-level altitude (feet)
Irrigation	340	231	6	132	10-25-85 5-14-86	91.8 83.6
Domestic	260	140	4	75	5-14-86	73.2
Public supply	315	220	4	114	10-24-85 9-14-86	73.3 65.7
Irrigation	312	--	3	54	9-11-85 5-14-86	31.4 15.6
Observation	155	149	4	60	9-11-85 5-14-86	19.4 2.2
Domestic	200	--	-	121	9-12-85 5-12-86	110.2 108.7
Unknown	191	--	-	134	9-12-85 5-12-86	117.6 116.7
Observation	160	147	4	131.12	9-30-85 5-31-86	106.29 107.02
Domestic	205	95	-	105.8	9-11-85 5-13-86	25.0 10.5
Observation	194	96	8	112.52	9-13-85 5-15-86	97.92 95.67
Observation	161	141	-	61	9-09-85 5-12-86	21.0 .1
Recreation	140	111	6	70.90	9-11-85 5-13-86	21.54 3.31
Domestic	215	115	6	63.7	9-12-85 5-15-86	11.0 8.5
Domestic	80	42	4	--	9-12-85 5-15-85	10.53 8.23
Domestic	60	42	2	21	9-12-85 5-14-86	12.5 10.0
Observation	68	58	4	134.5	9-09-85 5-12-86	130.3 126.8
Observation	48	38	4	140	9-09-85 5-12-86	138.4 135.2
Observation	598	188	6	68.3	9-09-85 5-12-86	46.8 42.3
Observation	585	300	4	22.8	9-09-85 5-12-86	47.5 45.9
Stock	106	--	2	42	9-11-85 5-13-86	37.3 31.1

Well No.	Identification No.	County	Owner or name
20	271422082150201	Manatee	Myakka River State Park
803	271622082040101	Manatee	I.M.C.--Golden Rainbow
23-2	271906082112402	Manatee	ROMP 23-2 (N. well) (488)
805	272051082094601	Manatee	Myakka City Community Center
807	272827082141601	Manatee	Kibler Lookout Tower
24	272830082245801	Manatee	Bruce Wager
H-1	273002082081701	Manatee	Beker H-1 Hawthorn
25	273202082253801	Manatee	Thomas Metcalf
44	273253082072801	Manatee	Estech Hawthorn 44
27A	273354082352401	Manatee	George Steven
21	273428082305701	Manatee	Marshall Armstrong
28	273506082253701	Manatee	Ellen Matheson
800	273649082123701	Manatee	W. E. Richter (800)
801	273729082091401	Manatee	Moody (801)
40	273851082031502	Polk	ROMP 40 Hawthorn
29	273913081331801	Polk	Neuman Wegvar
21	273923081531901	Polk	Dotson
UF5	274009081452202	Polk	Mobil-UF5 (north well)
UF9	274108081474601	Polk	Mobil-UF9 (north well)
UF7	274227081460401	Polk	Mobil-UF7 (one of two)
UF1	274238081415801	Polk	Mobil-UF1 (north well)

Well use	Well depth (feet)	Casing depth (feet)	Casing diameter (inches)	Land-surface altitude (feet)	Date	Water-level altitude (feet)
Unused	320	56	10	37	9-10-85 5-12-86	34.4 25.5
Unused	100	--	-	62	9-11-85 5-13-86	40.0 28.7
Observation	374	304	6	62.5	9-11-85	30.0
Public supply	--	--	-	43	9-11-85 5-13-86	33.6 24.4
Domestic	140	--	4	97	9-11-85 5-13-86	24.1 -4.1
Domestic	264	50	4	34	10-30-85 5-14-86	17.4 8.8
Observation	200	130	4	101	9-15-85 5-13-86	46.1 40.9
Irrigation	255	126	5	18	10-28-85 5-14-86	-1.0 -14.0
Observation	250	145	-	120	9-09-85	104.5
Unknown	110	50	3	5	5-19-86	6.0
Domestic	185	113	4	23	5-14-86	4.1
Domestic	180	106	5	42	10-28-85 5-14-86	11.8 .5
Domestic	350	80	6	108	9-11-85 5-13-86	96.3 94.3
Unknown	280	168	-	125	9-11-85 5-13-86	93.6 95.1
Observation	180	76	12	137.94	9-11-85 5-14-86	127.04 126.30
Irrigation	240	170	6	131	9-09-85 5-14-86	83.5 68.1
Domestic	220	147	4	118	9-10-85 5-13-86	63.8 50.3
Unknown	217	192	-	131	9-09-85 5-12-86	74.0 62.1
Unknown	235	202	-	102	9-09-85 5-12-86	65.1 52.0
Unknown	215	202	-	122.5	9-09-85 5-12-86	67.2 60.1
Unknown	243	221	-	163	9-09-85 5-14-86	83.6 67.6

Well No.	Identification No.	County	Owner or name
81	274358081540401	Polk	Pierce Tower (743-154-1)
36	274440081314801	Polk	Coley well
45	274547081470901	Polk	ROMP 45 Hawthorn
119	274722081590001	Polk	Bennet 119
140	274847081414501	Polk	C. D. Cloninger
8	275040081493001	Polk	I.M.C. 22A Hawthorn
164	275059081562201	Polk	Weigh Station (164)
41	275129082010401	Polk	751-201-1
42	275158081494601	Polk	Cochran (I.M.C.)
54	275301081495701	Polk	L. B. Barnes
59	275314081514202	Polk	ROMP 59 Hawthorn well
57	275411081372002	Polk	ROMP 57-2 Hawthorn
64	275523081502601	Polk	755-150-3 (Stuart)
1PN	280437081410207	Polk	1PN near Winter Haven
90	280550081542501	Polk	Francis Lee
10	280715081543501	Polk	807-154-433
1	265653082190301	Sarasota	Englewood RO Test 1
2	265710082205101	Sarasota	Englewood RO Test 2
3	270106082214101	Sarasota	Englewood deep zone no. 3
18	270714082155201	Sarasota	Blackburn Ranch Test 18

Well use	Well depth (feet)	Casing depth (feet)	Casing diameter (inches)	Land-surface altitude (feet)	Date	Water-level altitude (feet)
Domestic	201	110	4	140	9-10-85 5-12-86	128.9 124.1
Observation	319	208	6	97.5	9-09-85 5-13-86	85.0 68.4
Observation	192	110	4	121.58	9-11-85 5-14-86	68.34 55.67
Unknown	110	--	4	130	9-10-85 5-12-86	96.8 90.6
Unknown	--	--	-	152	9-09-85 5-12-86	125.8 120.1
Observation	227	68	8	122.53	9-09-85 5-13-86	77.22 66.51
Unknown	167	92	4	151	5-12-86	71.5
Domestic	80	60	4	125	9-10-85 5-12-86	108.0 102.8
Irrigation	125	65	4	133.67	9-09-85 5-13-86	79.85 71.83
Irrigation	120	60	4	126.05	9-11-85 5-15-86	73.56 68.40
Observation	142	122	6	117.84	9-11-85 5-14-86	78.96 70.51
Observation	140	95	7	128.10	9-11-85 5-12-86	11.80 11.81
Unused	73	57	2	111	9-09-85 5-13-86	8.3 65.5
Unknown	155	132	-	133	9-09-85 5-14-86	121.4 114.3
Unused	97	60	2	137.4	9-09-85 5-12-86	132.1 127.4
Observation	55	31	3	136.2	9-06-85 5-14-86	134.8 133.0
Unused	320	175	4	7	9-10-85 5-14-86	15.6 14.2
Unused	310	152	4	10	9-10-85 5-14-86	11.7 9.0
Observation	135	109	4	14.36	9-11-85	13.45
Unknown	351	282	4	25	9-10-85 5-13-86	39.6 34.5

Well No.	Identification No.	County	Owner or name
TR5-1	270808082270503	Sarasota	ROMP TR5-1 Hawthorn
70	270822082231101	Sarasota	Henry Ranch 1
TR5-2	270919082234203	Sarasota	ROMP TR5-2 lower Hawthorn
TR5-2 82	270919082234204 270931082252901	Sarasota Sarasota	ROMP TR5-2 Floridan Ewing Ranch (Holland)
19E	271021082151602	Sarasota	ROMP 29 East (intermediate aquifer)
93	271118082082401	Sarasota	Mabry Carlton 16
9	271118082285301	Sarasota	Osprey 9
110	271220082295201	Sarasota	Sarasota County Historical Society
25	271522082165801	Sarasota	Old Palmer Well
TR6-1	271601082330501	Sarasota	ROMP TR6-1 Hawthorn
28	272045082325201	Sarasota	Florida Power and Light
11	272049082324401	Sarasota	City of Sarasota, 11th Street
27	272133082324701	Sarasota	City of Sarasota, 27th Street

Well use	Well depth (feet)	Casing depth (feet)	Casing diameter (inches)	Land-surface altitude (feet)	Date	Water-level altitude (feet)
Observation	289	275	4	11.62	9-11-85 5-13-86	14.72 10.73
Unknown	286	40	8	15	9-10-85 5-13-86	17.6 17.1
Observation	265	245	4	15	9-10-85 5-13-86	27.9 22.3
Observation Irrigation	400 256	360 44	2 6	15	5-13-86 9-10-85	21.9 21.5
Observation	121	80	18	31	9-11-85 5-13-86	31.7 28.1
Irrigation	301	62	8	37	9-10-85 5-13-86	35.0 29.8
Observation	255	157	4	14.37	9-11-85 5-13-86	13.77 10.13
Unknown	224	41	4	10	9-10-85 5-13-86	13.4 10.1
Unused	360	72	4	15	9-10-85 5-12-86	17.5 10.4
Observation	315	300	6	5	10-04-85 5-15-86	9.1 5.3
Unused	358	108	4	10	9-09-85 5-15-86	11.6 7.1
Observation	479	43	6	8.73	9-11-85 5-15-86	14.20 5.61
Observation	343	45	12	6.84	9-11-85 5-13-86	13.86 2.39

APPENDIX B: Index of Geophysical

[All wells were logged by the U.S. Geological Survey or by the Southwest Survey Southwest Florida Subdistrict Office in Tampa. Type of other

Well number	Local name	County	Date
264611081555401	U.S. Geological Survey	Charlotte	7-68
264717081363701	Babcock	Charlotte	--
264809081564901	20-410	Charlotte	12-83
264840081443101	Babcock	Charlotte	7-70
264899081363401	Babcock	Charlotte	8-69
264918082011801	Hot Springs	Charlotte	11-66
264923082011701	C-107	Charlotte	11-66
264923082013701	Hot Springs	Charlotte	2-63
265017082153701	U.S. Geological Survey	Charlotte	11-66
265044082002701	C-103	Charlotte	9-65
265050082004401	C-102	Charlotte	9-65
265052082002101	So Sweet Groves	Charlotte	9-63
265057082002701	C-104	Charlotte	9-65
265108082171801	Rotunda Inc.	Charlotte	11-71
265124081433601	Babcock	Charlotte	7-68
265124081453701	U.S. Geological Survey	Charlotte	8-68
265124082012401	Horc #1	Charlotte	7-69
265127081532501	U.S. Geological Survey	Charlotte	8-68
265128081429401	Babcock	Charlotte	9-70
265131081572101	Cecil Webb Wildlife Preserve	Charlotte	6-68
265158082171701	Rotunda Inc.	Charlotte	3-72
265158082171702	Rotunda Inc.	Charlotte	6-72
265202082121202	Rotunda Inc.	Charlotte	5-72
265202082171701	Rotunda Inc.	Charlotte	3-72
265202082171702	Rotunda Inc.	Charlotte	5-72
265204082005501	C-99	Charlotte	7-70
265215082005501	C-96	Charlotte	7-70
265218082012901	PGI #1	Charlotte	3-80
265218082140301	Rotunda Inc.	Charlotte	2-72
265233081201301		Charlotte	10-69
265247082180901	Gasparilla Pines	Charlotte	2-72
265257081444101	Babcock	Charlotte	8-68
265258082011001	20-45	Charlotte	6-80
265313081442601	Babcock	Charlotte	4-67
265316081433601	Babcock	Charlotte	4-69
265318081441501	Babcock	Charlotte	4-69
265321081442601	Babcock	Charlotte	4-69
265326081433901	Babcock	Charlotte	4-67
265342082005501	20-682	Charlotte	4-85

Logs in Southwest Florida

Florida Water Management District and are on file in the U.S. Geological
log: f, fluid velocity; g, gamma-gamma density; n, neutron; s, sonic]

Electric	Gamma-ray	Type of log and depth logged, in feet below land-surface datum				Flow meter	Other
		Caliper	Fluid conductivity	Tempera- ture			
49	190	49	--	--	--	--	--
210	210	--	--	--	--	--	--
667	667	667	667	667	--	--	--
542	542	--	--	--	--	--	--
--	--	--	--	--	--	--	--
516	--	--	--	--	--	--	--
265	--	265	--	--	--	--	--
1,575	1,500	--	--	--	--	--	--
408	408	--	--	--	--	--	--
1,116	760	--	--	--	--	--	--
1,160	1,160	--	--	--	--	--	--
992	--	--	--	--	--	--	--
1,155	--	--	--	--	--	--	--
246	312	242	--	--	--	--	--
--	114	--	--	--	--	--	--
197	--	--	--	--	--	--	--
1,454	1,454	1,454	1,454	--	--	--	--
54	264	48	264	264	--	--	--
450	450	450	--	--	--	--	--
384	564	384	564	--	--	--	--
66	120	65	--	--	--	--	--
25	144	23	--	--	--	--	--
23	140	21	--	--	--	--	--
78	136	78	--	--	--	--	--
23	140	21	--	--	--	--	--
894	894	894	894	--	--	--	f
460	--	460	--	--	--	--	f
182	182	182	183	182	--	--	--
87	162	87	--	--	--	--	--
--	489	--	--	--	--	--	--
54	390	54	--	--	--	--	--
174	284	174	282	282	--	--	--
--	--	3	--	--	--	--	--
272	272	--	--	--	--	--	--
--	908	908	--	--	--	--	f
221	221	--	--	--	--	--	--
459	459	439	459	--	--	--	--
188	188	--	--	--	--	--	--
--	--	566	--	--	--	--	--

Well number	Local name	County	Date
265343081292601	20-1006	Charlotte	6-80
265355081580701	20-462	Charlotte	4-85
265404082011901	20-64	Charlotte	2-68
265456082162201	Rotunda Inc.	Charlotte	7-72
265504082000601	U.S. Geological Survey	Charlotte	8-68
265531082194801	ROMP TR3-3	Charlotte	6-86
265531082194801	ROMP TR3-3	Charlotte	6-86
265549082125901	Nat Wolfe	Charlotte	2-68
265549082125901	20-94	Charlotte	6-79
265555081590501	Golden Groves	Charlotte	6-68
265557082162201	U.S. Geological Survey	Charlotte	10-66
265613082174501	General Development Corporation	Charlotte	4-72
265615081543501	Florida State Game and Fresh Fish	Charlotte	4-68
265622082121601	General Development Corporation	Charlotte	2-82
265638082130701	TR3-1	Charlotte	3-81
265641081590301	Swiss Groves	Charlotte	4-72
265645082194701	TW #3 Aldersgate Development	Charlotte	7-72
265646081554501	U.S. Geological Survey	Charlotte	8-86
265646081584601	Swiss Groves	Charlotte	7-79
265648081514701	E. J. Hall	Charlotte	7-68
265649081565101	M. H. Davis	Charlotte	7-68
265652082185801	Englewood Water District	Charlotte	2-76
265719081464801	20-650	Charlotte	5-85
265739081591401	20-82	Charlotte	7-80
265749081414701	Tropical River Groves	Charlotte	1-68
265759082040101	Paul Smith	Charlotte	11-65
265802081544401	Lary Zehner	Charlotte	10-68
265828081414601	Tropical River Groves	Charlotte	1-76
265830081565501	Da Costa	Charlotte	4-85
265833081530201	J. B. Washington	Charlotte	3-62
265835081565501	20-525 Peter Ray #2	Charlotte	4-85
265836081565101	20-528 Peter Ray #1	Charlotte	4-85
265837081561101	Shell Creek 20-981-0093	Charlotte	7-75
265838081530701	J. B. Washington #2	Charlotte	3-62
265842081414801	Tropical River Groves	Charlotte	2-68
265843081424601	B-1-W	Charlotte	1-69
265851081591301	20-68	Charlotte	6-78
265853081414801	B-7	Charlotte	1-69
265855081545901	20-80	Charlotte	6-79
265902082032801	Suncoast Peach Company	Charlotte	9-67

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Temperature	Flow meter	Other
524	524	524	--	524	--	--
--	--	386	--	386	--	--
274	--	--	--	--	--	--
88	151	87	--	--	--	--
29	152	29	--	--	--	--
--	--	--	--	1,540	--	--
--	--	--	540	--	--	--
255	291	--	--	--	--	--
--	300	--	--	300	--	--
--	276	--	--	--	--	--
186	298	--	--	--	--	--
272	272	272	--	--	272	--
521	637	521	--	--	--	--
992	--	996	994	984	--	--
608	608	608	603	608	--	--
922	922	--	--	922	--	--
--	141	--	--	--	--	--
83	279	83	279	--	--	--
--	915	915	915	918	--	--
800	956	800	956	956	--	--
98	424	98	424	424	--	--
--	--	912	--	--	--	--
890	890	890	890	890	--	--
792	792	792	--	792	--	--
518	518	585	--	--	--	--
403	120	--	--	--	--	--
453	--	--	--	--	--	--
406	--	408	--	--	--	--
--	--	928	928	928	--	--
653	--	--	--	--	--	--
--	--	566	--	612	--	--
--	--	612	--	612	--	--
--	330	330	330	330	--	--
497	497	--	--	--	--	--
1,256	1,256	--	--	--	--	--
510	510	510	510	--	--	--
--	400	400	--	400	--	--
536	--	--	--	--	--	--
630	560	630	--	--	--	--
586	586	586	586	--	586	--

Well number	Local name	County	Date
265906081414701	Tropical River Groves	Charlotte	1-69
265910081454201	Nat Wolfe	Charlotte	10-68
265916082290301	Buffam	Charlotte	7-67
265920082045601	Port Charlotte Golf Course	Charlotte	10-66
265932081424701	Tropical River Groves	Charlotte	2-69
265941081561401	U.S. Geological Survey	Charlotte	7-68
265947081424701	Tropical River Groves	Charlotte	10-67
265959081393601	Tropical River Groves	Charlotte	10-67
270002082090801	General Development Corporation	Charlotte	3-60
270005082074401	20-89	Charlotte	3-79
270013081425101	20-1015	Charlotte	11-84
270014081425001	20-1016	Charlotte	11-84
270028082081801	General Development Corporation	Charlotte	12-68
270030082071802	Restlawn Memorial Gardens	Charlotte	4-68
270043082084601	General Development Corporation	Charlotte	2-68
270043082085701	General Development Corporation	Charlotte	12-68
270044082084701	General Development Corporation	Charlotte	3-60
270100082073301	General Development Corporation	Charlotte	3-60
270102081533101	Ryals #4	Charlotte	10-68
270105081534001	Ryals #1	Charlotte	11-68
270106082073501	General Development Corporation	Charlotte	9-68
270112082005201	P.G.I. #2	Charlotte	4-80
270120081533801	Ryals #3	Charlotte	11-68
270131082080401	General Development Corporation	Charlotte	3-60
270133082034601	U.S. Geological Survey	Charlotte	2-66
270134082075101	General Development Corporation	Charlotte	3-60
270136081533601	Ryals #5	Charlotte	10-68
270136082010201	P.G.I. #3	Charlotte	4-80
270137082074201	General Development Corporation	Charlotte	9-68
270141082071701	General Development Corporation	Charlotte	9-68
270152082002801	ROMP 10 U.S. Geological Survey	Charlotte	7-75
270152082002801	SWFWMD ROMP 10	Charlotte	7-75
270152082002801	SWFWMD ROMP 10	Charlotte	3-75
270152082002802	SWFWMD	Charlotte	7-75
270152082002802	SWFWMD ROMP 10	Charlotte	7-75
270152082002803	SWFWMD	Charlotte	7-75
270152082002803	SWFWMD ROMP 10	Charlotte	7-75
270152082002804	U.S. Geological Survey	Charlotte	7-75
270152082092201	General Development Corporation	Charlotte	3-60
270154082102501	General Development Corporation	Charlotte	3-60

Type of log and depth logged, in feet below land-surface datum						
Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
--	483	--	--	--	--	--
508	608	508	--	--	--	--
173	--	--	173	--	--	--
28	152	--	--	--	--	--
365	365	365	--	--	--	--
31	360	31	360	360	--	--
414	474	414	--	--	--	--
354	418	418	--	--	--	--
176	--	--	--	--	--	--
--	266	266	--	264	--	--
--	--	129	129	--	--	--
450	450	450	450	450	450	--
227	227	227	--	--	--	f
281	425	--	--	--	--	--
184	256	--	--	--	--	--
269	269	269	--	--	--	--
412	--	--	--	--	--	--
267	--	--	--	--	--	--
596	--	--	--	--	--	f
392	392	392	--	--	--	--
288	--	--	--	--	--	--
628	628	625	--	625	--	--
392	392	392	--	--	--	--
287	--	--	--	--	--	--
344	--	186	--	--	--	--
473	473	--	--	--	--	--
612	--	--	--	--	--	--
417	418	417	418	418	--	--
456	456	546	--	--	--	--
453	453	--	--	--	--	--
9	--	--	--	--	--	--
46	--	56	--	--	--	--
831	--	860	--	--	--	--
284	--	275	--	--	--	--
284	--	275	--	--	--	--
173	--	175	--	--	--	--
173	--	175	--	--	--	--
9	--	--	--	--	--	--
502	--	--	--	--	--	--
212	--	--	--	--	--	--

Well number	Local name	County	Date
270157082071001	General Development Corporation	Charlotte	9-68
270159082033101	General Development Corporation	Charlotte	11-65
275557081584901	20-409	Charlotte	8-83
275558081584901	20-1014	Charlotte	3-84
270225081415701	University of Texas	De Soto	4-71
270234081575801	R. W. Banks	De Soto	8-70
270239081574601	Arthur	De Soto	4-71
270246081424301	University Board of Regents	De Soto	4-71
270306081420001	V. T. Hall	De Soto	4-71
270312082024201	Double D Ranch	De Soto	8-62
270320081491201	Horace Nichol	De Soto	4-69
270330081542901	Frank Pollard	De Soto	8-62
270333081473301	John R. Aboria	De Soto	7-62
270333081484701	Nat Wolfe	De Soto	4-71
270345082002401	20-404	De Soto	8-83
270345082012901	General Development Corporation	De Soto	12-74
270347081510201	Nat Wolfe	De Soto	4-71
270347081573201	Jeff Fort	De Soto	6-62
270356081484101	Nat Wolfe	De Soto	8-68
270359081464401	Nichols Ranch	De Soto	4-71
270412081474901	Dale Foster	De Soto	6-62
270413081585801	General Development Corporation	De Soto	8-73
270414081584701	General Development Corporation	De Soto	9-72
270417081575601	G. V. Russel	De Soto	8-70
270419081585901	General Development Corporation	De Soto	8-73
270530082000601	General Development Corporation	De Soto	12-74
270554082003601	General Development Corporation	De Soto	12-74
270555082003901	General Development Corporation	De Soto	2-75
270609082010101	D. J. Thompson	De Soto	1-72
270611082000401	Thornton	De Soto	12-74
270624081494301	Hoffman	De Soto	10-68
270807082002801	Robert Nunez	De Soto	4-71
270811081481101	Firewell	De Soto	12-65
270814081481101	Carlston Field Mental Hospital	De Soto	12-65
270826082004101	Calvin Boggess	De Soto	1-71
270826082004101	Calvin Boggess	De Soto	1-71
270831081583401	H. L. Johnson	De Soto	4-71
270953081570601	Claude M. Johnson	De Soto	3-71
270958081554001	Welles Fruit and Livestock	De Soto	3-71
270958081581201	Stanley Sargent	De Soto	3-71

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
259	259	--	--	--	--	--
--	428	360	--	--	--	--
--	--	240	--	340	--	--
829	829	829	829	829	--	--
334	396	348	--	--	--	--
614	704	614	--	--	--	--
369	448	444	--	--	--	--
346	400	348	--	--	--	--
339	395	--	--	--	--	--
616	616	--	--	--	--	--
434	434	434	--	--	--	--
610	610	--	--	--	--	--
1,211	1,211	--	--	--	--	--
427	464	424	--	--	--	--
522	522	522	522	522	--	--
449	496	440	--	--	--	--
629	624	620	--	--	--	--
468	468	--	--	--	--	--
896	1,004	896	1,004	1,004	--	--
333	368	--	--	--	--	--
460	460	--	--	--	--	--
1,310	1,310	1,185	--	--	--	--
1,085	1,184	1,083	1,180	--	--	f
341	411	341	--	--	--	--
1,310	1,310	1,185	--	--	--	--
535	535	535	--	--	--	--
1,427	1,425	1,426	--	--	--	--
1,041	1,041	1,040	1,040	--	--	--
1,009	1,068	1,009	--	--	--	f
868	860	860	--	--	--	--
956	--	--	--	--	--	f
221	230	--	--	--	--	--
508	--	--	--	--	--	--
535	--	--	--	--	--	--
891	948	891	--	--	--	--
--	748	891	--	--	--	--
--	270	--	--	--	--	--
167	229	167	--	--	--	--
1,057	1,125	1,125	--	--	--	f
454	561	492	--	--	--	--

Well number	Local name	County	Date
271026081583601	ROMP #17	De Soto	12-84
271049081554101	Nat Wolfe	De Soto	8-70
271107081550501	Phillip Berkowich	De Soto	4-71
271109081541901	Minute Maid	De Soto	4-71
271113081543301	Minute Maid	De Soto	8-70
271115081462601	TR16-3	De Soto	10-79
271115081462701	ROMP #16	De Soto	6-84
271135081372501	Bright Hour Ranch	De Soto	9-69
271135081372501		De Soto	2-71
271145081464801	Sebring and Myers	De Soto	9-62
271155081483801	Nellie Brown	De Soto	4-70
271156081483901	Nellie Brown	De Soto	9-62
271210081354301	Bright Hour Ranch	De Soto	2-71
271213081505001	#1 Elevation Tank	De Soto	10-64
271228081400801	De Soto Correctional Institute	De Soto	11-71
271232081292201	ROMP #15	De Soto	5-84
271232081392201	ROMP #15	De Soto	6-85
271246081544301	Myakka Processors Inc.	De Soto	10-69
271323081384702	American Agronomics	De Soto	4-70
271323081394201	Tropical River Groves J-1	De Soto	12-68
271416081284701	Tropical River Groves	De Soto	1-76
271416081364601	American Agronomics	De Soto	1-71
271416081394301	Tropical River Groves J-2	De Soto	2-69
271417081334901	Tropical River Groves	De Soto	5-72
271417081344801	Tropical River Groves	De Soto	11-71
271421081384701	Tropical River Groves J-8	De Soto	10-69
271431081541401	D-29	De Soto	8-62
271444081354701	Tropical River Groves	De Soto	1-72
271458081535801	M. Hollingsworth	De Soto	4-71
271458082032101	Phillips Petroleum	De Soto	1-75
271509081335001	Tropical River Groves	De Soto	5-72
271509081344901	Tropical River Groves	De Soto	9-71
271509081354801	Tropical River Groves	De Soto	9-71
271509081364701	American Agronomics	De Soto	10-70
271509081384101	Tropical River Groves	De Soto	9-69
271509081384601	Tropical River Groves	De Soto	9-69
271509081384602	American Agronomics	De Soto	12-69
271601081335001	Tropical River Groves	De Soto	1-71
271601081354801	American Agronomics	De Soto	11-70
271601081364601	Tropical River Groves	De Soto	7-70

Type of log and depth logged, in feet below land-surface datum						
Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
832	--	830	--	832	--	n
459	543	440	--	--	--	--
340	428	--	--	--	--	--
240	320	--	--	--	--	--
284	--	284	--	--	--	--
502	940	642	542	882	--	--
940	942	--	500	938	--	s,n
1,298	1,478	1,478	--	--	--	--
1,298	1,478	--	--	--	--	--
439	439	--	--	--	--	--
284	327	--	--	--	--	--
327	327	--	--	--	--	--
230	310	--	--	--	--	--
387	387	--	--	--	--	--
321	--	348	--	--	--	--
575	580	575	--	--	--	--
1,372	--	--	1,372	1,372	--	--
1,229	--	--	--	--	--	--
1,246	730	--	--	--	--	--
804	804	804	780	--	--	--
328	--	328	--	--	--	--
1,132	--	1,337	--	--	--	--
1,404	1,404	--	--	--	--	--
1,328	1,406	1,328	--	--	--	--
632	--	632	--	--	--	--
999	999	--	--	--	--	--
316	316	--	--	--	--	--
1,121	1,295	1,122	--	1,253	--	f
--	489	--	--	--	--	--
1,486	320	1,500	--	1,500	--	--
824	1,016	--	--	--	--	--
1,158	1,322	1,157	--	--	--	--
957	1,113	1,054	--	--	--	--
1,146	1,322	1,146	--	--	--	--
516	--	--	--	--	--	--
516	--	--	--	--	--	--
246	266	--	--	--	--	--
720	--	720	--	--	--	--
1,144	1,806	1,144	--	--	--	--
1,160	1,316	1,314	--	--	--	--

Well number	Local name	County	Date
271601081374601	American Agronomics	De Soto	2-70
271618081590901	V. C. Hollingsworth	De Soto	9-62
271623081515901	Camp Chanyatah	De Soto	11-71
271623081520101	Camp Chanyatah	De soto	11-71
271654081374601	American Agronomics	De Soto	5-73
271654081384602	Tropical River Groves	De Soto	8-74
271729081403003	U.S. Geological Survey	De Soto	4-75
271743081374602	American Agronomics	De Soto	4-70
271746081384601	American Agronomics	De Soto	12-69
271746081404301	S. Tomatoes Growers	De Soto	11-71
271800081493001	ROMP 26	De Soto	8-82
271834081530401	Bruning	De Soto	12-62
271841081572101	D. E. Carlton	De Soto	3-72
271854082012001	Walter Bethel	De Soto	6-73
272012081482301	D. E. Marshall	De Soto	7-62
272511081494101	20-1017	De Soto	6-85
271431081541401	Joe Burtscher	De Soto	9-62
272340081475401	B. H. Griffin	Hardee	1-72
272404081553401	Robert Norris	Hardee	3-72
272503081545601	Ervin Shapario	Hardee	8-62
272557081535201	Hardee Groves Inc.	Hardee	8-62
272701081394901	Willis Beatty	Hardee	8-62
272703081480801	Albitton Farm	Hardee	9-62
272715081580001	ROMP 31	Hardee	8-76
272728081474701	ROMP 30 S. S. Slaughter	Hardee	2-81
272739081423501	New well - Republic Groves	Hardee	8-62
272800081484301	G. S. Slaughter	Hardee	1-72
272807081585901	I.M.C.	Hardee	6-73
272932081492001	John F. Martins	Hardee	1-72
273103081363701	M. A. Smith	Hardee	8-62
273135081480101	Wheeler Farms Inc.	Hardee	8-72
273156081451401	C. E. Trimmer	Hardee	7-62
273205081433001	Charles Adler	Hardee	8-62
273220081493201	J. W. Cherry	Hardee	12-62
273250081480801	City of Wauchula	Hardee	8-63
273251081494601	Joe L. Davis	Hardee	1-72
273331081414601	Sam Trogden	Hardee	11-74
273411082025101	W. J. Durrance	Hardee	8-62
273421081361401	M. A. Smith	Hardee	12-62

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
716	916	916	--	--	--	--
--	1,252	--	--	--	--	--
164	194	--	--	--	--	--
149	183	--	--	--	--	--
1,110	1,260	1,158	--	--	--	--
1,358	1,358	1,360	--	--	--	--
--	839	250	--	--	--	--
1,203	1,343	1,230	--	--	--	--
1,032	1,248	--	--	--	--	--
850	1,243	851	--	--	--	--
--	250	250	334	263	--	--
664	650	--	--	--	--	--
810	956	809	--	--	--	--
1,289	1,433	--	--	--	--	--
478	478	--	--	--	--	--
1,062	1,062	1,062	1,062	1,062	--	--
316	--	--	--	--	--	--
186	260	186	--	--	--	--
961	1,067	960	--	--	--	--
820	824	--	--	--	--	--
1,080	1,080	--	--	--	--	--
638	638	--	--	--	--	--
1,134	1,132	--	--	--	--	--
1,144	1,144	1,144	1,144	1,144	--	--
365	365	365	--	--	--	--
860	850	--	--	--	--	--
269	310	269	--	--	--	--
223	346	--	--	--	--	--
143	173	143	--	--	--	--
849	849	--	--	--	--	--
--	246	199	--	--	--	--
267	267	--	--	--	--	--
658	658	--	--	--	--	--
546	540	--	--	--	--	--
1,103	1,103	--	--	--	--	--
288	346	288	--	--	--	--
1,194	1,193	1,194	--	--	--	--
1,062	1,062	--	--	--	--	--
1,172	--	--	--	--	--	--

Well number	Local name	County	Date
273708081435401	S. J. Tilden	Hardee	1-72
271553081208401	ROMP 28x	Highlands	10-82
271708081220001	1013	Highlands	11-83
273615081284901	ROMP 43xx	Highlands	1-82
270704082471201	TR11-2	Hillsborough	3-79
274032082150001	ROMP 123	Hillsborough	2-77
274058082282801	23	Hillsborough	6-76
274201082212501	Hillsborough	Hillsborough	6-75
274203082290901	45	Hillsborough	6-76
274228082081801	G. Hood	Hillsborough	3-74
274240082212703	ROMP 50	Hillsborough	5-82
274243082211503	SWFWMD	Hillsborough	12-76
274252082232401	Hillsborough County	Hillsborough	3-76
274256082201601	Hillsborough County	Hillsborough	11-74
274315082201701	Hillsborough County	Hillsborough	11-74
274352082061001	Brewster #7	Hillsborough	3-76
274400082070801		Hillsborough	8-75
274403082200901	Hillsborough County	Hillsborough	3-76
274407082250501	P. Pickman	Hillsborough	7-76
274407082260901	W. H. Winis	Hillsborough	7-76
274408082222301	Council Farms	Hillsborough	7-76
274410082230701	Hillsborough	Hillsborough	6-76
274412082071401	Brewster	Hillsborough	3-75
274412082071402	Brewster	Hillsborough	3-75
274414082200901	Ellsberry	Hillsborough	3-76
274424082083501	ROMP 48	Hillsborough	2-76
274427082083703	ROMP 48	Hillsborough	4-73
274455082245501	Replacement Council	Hillsborough	6-80
274503082252001	Shakey	Hillsborough	6-76
274530082154401	ROMP 49	Hillsborough	1-77
274628082240301	Ellsberry	Hillsborough	6-76
274630082191301	First Offenders (State)	Hillsborough	2-75
274722082200701	Fisher	Hillsborough	4-76
274745082041001	I.M.C.	Hillsborough	12-74
274745082041301	I.M.C.	Hillsborough	2-75
274745082041601	I.M.C.	Hillsborough	12-74
274752082234001	11-10	Hillsborough	4-85
274857082195301	Hillsborough County	Hillsborough	3-69
274907082195301	Hillsborough County	Hillsborough	2-69
274919082194701	Hillsborough County	Hillsborough	2-69

Type of log and depth logged, in feet below land-surface datum						
Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
932	1,066	332	--	--	--	--
1,388	1,387	1,388	1,388	1,388	--	--
1,630	1,630	1,630	1,630	1,630	--	--
1,120	1,130	1,130	1,030	1,030	--	--
587	587	--	587	476	--	--
--	598	598	598	598	--	--
--	628	630	--	610	--	--
478	550	551	--	--	--	--
--	444	448	446	--	--	--
569	862	585	384	--	--	--
640	934	1,439	1,500	1,500	--	--
--	--	930	1,465	880	--	--
266	456	--	--	488	--	--
584	656	500	--	--	--	--
356	591	364	--	--	--	--
--	154	38	--	--	--	--
--	--	60	--	40	--	f
260	476	--	225	400	--	--
--	--	458	460	--	--	--
--	--	154	140	--	--	--
--	828	828	814	--	--	--
--	844	845	832	849	--	--
175	172	--	--	--	--	--
130	--	144	--	--	--	--
--	758	673	--	--	--	--
215	215	215	--	215	--	--
919	919	919	919	919	--	--
306	306	302	--	--	--	--
--	533	530	533	516	--	--
618	618	618	618	618	--	--
--	394	389	394	378	--	--
380	487	355	--	--	--	--
--	--	162	--	--	--	--
190	289	220	--	--	--	--
111	192	188	--	--	--	--
949	940	908	--	--	--	--
--	--	320	--	--	--	--
384	594	--	--	--	--	--
376	586	--	540	--	--	--
382	592	--	548	--	--	--

Well number	Local name	County	Date
275001082153702	Connie Espy	Hillsborough	2-75
275045082223301	Clava Tanner	Hillsborough	6-76
275055082095301	Hills. County, Pinecrest School	Hillsborough	3-69
275152082035801	Seaboard Airline Railroad	Hillsborough	11-81
275200082085401	EMW-4	Hillsborough	7-83
275215082201901	U. S. Phosphoric	Hillsborough	6-76
275322082285201	Florida Bureau of Geology	Hillsborough	2-72
275337082171701	Bloomingdale	Hillsborough	4-76
275337082181001	Country Side	Hillsborough	4-77
275425082222701	SWFWMD TR-10-2	Hillsborough	5-78
275429082094101	ROMP 61	Hillsborough	1-78
275505082175301	Hillsborough County	Hillsborough	11-76
275508082164401	Hillsborough County	Hillsborough	11-76
275551082062701	K. W. Bakley	Hillsborough	6-68
275657082251601	City of Tampa	Hillsborough	6-66
275711082032901	City of Tampa	Hillsborough	5-71
275711082032901	Lamb	Hillsborough	3-76
275731082123201	Gables	Hillsborough	3-76
275736082162001	Kingsway Downs	Hillsborough	4-77
275747082183901	Hillsborough County	Hillsborough	7-76
275833082165501	Hillsborough County	Hillsborough	7-76
280154082205001	Anderson	Hillsborough	1-76
280331082203601	ROMP 67-1	Hillsborough	3-79
280354082381901	City of St. Petersburg	Hillsborough	6-73
263818082020901	Pine Island	Lee	10-71
264302081445001	Owl Creek	Lee	4-69
264323082153001	Seaboard Airline Railroad	Lee	8-65
264435082153801	Boca Grand Mobile Hotel	Lee	5-62
271611082050201	J. J. Ranch	Manatee	7-64
271743082103601		Manatee	7-64
271832082064801	U.S. Geological Survey	Manatee	7-65
271852082104101	ROMP 23-2	Manatee	2-79
271852082104101	ROMP 23-1	Manatee	3-79
271940082080201	Babcock #1	Manatee	9-73
272034082120101	Green	Manatee	9-65
272034082145201	Russ and Pulnal	Manatee	4-62
272047082114401	Foxworthy	Manatee	12-63
272102082100601	Old Well Myakka	Manatee	5-62
272242082235501	Schroeder	Manatee	4-78
272332082305901	Crescent Farms	Manatee	12-79

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
158	197	193	150	--	--	--
--	164	164	163	--	--	--
181	280	--	--	--	--	--
169	206	202	--	--	--	--
902	902	902	902	902	--	--
--	648	648	649	611	--	--
392	392	392	--	--	--	--
256	370	272	352	346	--	--
--	197	206	176	--	--	--
459	465	465	459	459	--	--
995	998	1,000	--	995	--	--
--	340	340	245	--	--	--
--	195	202	--	--	--	--
672	730	674	672	672	--	--
--	692	650	--	--	--	--
201	637	196	--	--	--	--
--	55	54	--	--	--	--
--	73	52	--	--	--	--
--	343	350	287	274	--	--
--	--	263	225	--	--	--
--	--	--	293	--	--	--
48	48	48	--	--	--	--
442	442	--	442	442	--	--
--	--	--	424	--	--	--
978	--	--	978	--	--	--
--	--	458	458	--	--	--
250	571	387	--	--	--	--
197	197	--	--	--	--	--
1,080	1,080	--	--	--	--	--
1,324	1,324	--	--	--	--	--
585	598	576	--	--	--	--
432	363	432	374	364	--	--
432	--	432	--	--	--	--
1,382	1,382	1,382	--	--	--	--
909	909	--	--	--	--	--
962	962	--	--	--	--	--
644	644	--	--	--	--	--
539	539	--	--	--	--	--
--	1,092	--	--	--	--	--
614	628	612	--	--	--	--

Well number	Local name	County	Date
272337082305901	Crescent Farms	Manatee	12-79
272356082181301	U.S. Geological Survey	Manatee	5-65
272404082161701	City of Sarasota	Manatee	11-78
272417082350901	Club Longboat	Manatee	11-72
272438082325201	Midway Groves	Manatee	11-65
272447082302301	Clyde Bradley	Manatee	4-74
272505082331001	Manatee County	Manatee	10-71
272505082331401	Manatee County	Manatee	11-71
272510082345701	TR7-1	Manatee	7-81
272513082333801	Whitfield Estates Water System	Manatee	5-61
272523082033601	Horace Gough	Manatee	5-65
272523082033601	Horace Gough	Manatee	5-62
272533082292601	TR7-3	Manatee	6-80
272540082405001	Peek #3	Manatee	4-77
272545082410401	Whitney Beach	Manatee	9-64
272546082405501	Peek #4	Manatee	4-77
272557082302301	Manatee Fruit Company	Manatee	1-73
272558082360601	El Conquistador Golf Course	Manatee	10-72
272610082353802	Manatee Junior College	Manatee	5-73
272647082183401	Hunsader Brothers	Manatee	10-78
272700082315301	Reasoner Nursery	Manatee	10-72
272708082343101		Manatee	6-76
272730082083401	U.S. Geological Survey	Manatee	11-65
272731082054601	Pass Grove	Manatee	12-62
272735082083401	U.S. Geological Survey	Manatee	11-65
272750082415401	Pine Trails Park	Manatee	8-77
272758082415301	Azure Shores Well Association	Manatee	3-72
272810082283201	21-1003	Manatee	2-85
272825082380201	L. Turner	Manatee	3-68
272829082220101	Manatee Schroeder	Manatee	4-78
272838082142201	Kibler Ranch	Manatee	4-78
272838082142401	Kibler Ranch	Manatee	4-78
272854082373401	Freedom Village	Manatee	5-84
272902082364601	West Coast Marketing Company	Manatee	11-67
272918082370601	West Coast Marketing Company	Manatee	7-65
272924082405001	21-1002	Manatee	2-85
272925082405101	21-1001	Manatee	2-85
272925083362501	Bradenton Country Club	Manatee	10-64
272926082370301	West Coast Marketing Company	Manatee	
272931082331901	Tropicana	Manatee	4-76

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
325	337	336	--	--	--	--
448	--	--	--	--	--	--
--	469	--	--	--	--	--
433	433	433	--	--	--	--
796	796	794	--	--	--	--
436	488	439	--	--	--	--
--	79	67	--	--	--	--
53	76	53	--	--	--	--
630	630	629	630	630	560	--
659	--	--	--	--	--	--
1,204	1,204	1,202	1,204	--	--	--
--	1,204	1,202	--	--	--	--
620	--	630	632	620	--	s,n
411	411	411	411	411	--	--
228	--	--	--	--	--	--
409	--	410	410	410	--	--
652	756	656	--	--	--	--
350	395	308	--	--	--	--
12	22	12	--	--	--	--
1,049	1,226	1,207	--	--	--	--
475	500	473	--	--	--	--
--	295	293	--	--	--	--
548	548	548	--	548	--	--
1,198	1,198	--	--	--	--	--
548	--	548	--	--	--	--
--	381	381	--	381	--	--
291	291	289	--	--	--	--
--	--	473	--	476	--	--
586	586	586	586	--	--	f
1,002	1,088	982	--	--	--	--
941	1,115	--	--	--	--	--
941	1,115	1,108	--	--	--	--
--	--	643	--	--	--	--
564	--	--	--	--	--	--
525	--	--	--	--	--	--
--	--	200	--	--	--	--
--	--	276	--	--	--	--
672	672	--	--	--	--	--
657	--	--	--	--	--	--
899	956	944	943	--	--	--

Well number	Local name	County	Date
272939082382101	Old Palma Sola Park	Manatee	5-73
272945082373701		Manatee	4-76
272945082382101	Consumer's Utilities Inc.	Manatee	7-62
272946082380401	J. L. Holding Company	Manatee	4-76
272948082285301	Manatee Royal Palms Inc.	Manatee	5-65
272949082404001	Perico Island	Manatee	4-75
272956082410201	Manatee Fruit Company	Manatee	3-71
27300082065101	Beker	Manatee	9-76
273009082250601	C. L. Regan	Manatee	3-71
273031082380701	Freedland	Manatee	10-63
273031082380701	Freedland	Manatee	3-71
273044082385401	21-480	Manatee	4-85
273047082333301	Manatee Civic Center	Manatee	6-83
273048082385201	Lynch Nursery	Manatee	11-70
273113082334601	21-450	Manatee	8-83
273121082344401	21-563	Manatee	2-85
273129082354401	City of Palmetto	Manatee	7-71
273129082430201	Key Royale Country Club #2	Manatee	3-71
273131082430301	Key Royale Country Club #3	Manatee	3-71
273132082314901	Manson Cemetary 21-445	Manatee	8-83
273207082343701	Manatee Fruit Company	Manatee	4-79
273207082343701	Manatee Fruit Company	Manatee	4-79
273213082034001	Crescent D Ranch	Manatee	12-62
273228082314301	Roach	Manatee	7-83
273252082072401	Swift Chemical Company	Manatee	2-75
273304082334701	State Road Department	Manatee	10-63
273332082333201	Skyway Mobile Home Park	Manatee	3-71
273333082332901	Skyway Mobile Home Park	Manatee	3-71
273403082332201	Paisley and Stone	Manatee	3-71
273406082332801	21-458	Manatee	12-83
273427082291001	Lyndee Dairy	Manatee	5-77
273427082291001	Lyndee Dairy	Manatee	5-72
273458082324601	SWFWMD	Manatee	2-80
273458082324701	TR8-1	Manatee	12-82
273511082060401	Duette Ranch	Manatee	3-72
273548082253301	21-558	Manatee	2-85
273556082151201	Norda Ranch	Manatee	6-76
273559082251901	Heller Corporation	Manatee	6-76
273618082173601	Florida Power and Light	Manatee	4-75
273618082173601	Florida Power and Light	Manatee	4-75

Electric	Type of log and depth logged, in feet below land-surface datum					
	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
275	530	--	--	--	--	--
507	--	524	--	--	--	--
325	325	--	--	--	--	--
256	250	250	--	--	--	--
452	--	--	--	--	--	--
598	596	490	595	--	--	--
615	615	--	615	--	--	f
--	1,244	1,244	--	--	--	--
653	653	--	--	653	--	f
559	559	--	--	--	--	--
559	631	--	631	--	--	f
--	--	171	--	171	--	--
281	281	281	--	281	--	--
460	648	--	--	--	--	--
--	--	487	--	487	--	--
--	--	267	--	267	--	--
356	551	350	--	--	--	--
452	--	452	452	452	--	f
402	402	402	402	402	--	f
--	--	548	--	548	--	--
603	609	609	--	--	--	--
603	--	609	--	--	--	--
591	560	--	--	--	--	--
566	566	424	566	--	--	--
845	1,207	884	--	--	--	--
522	--	--	--	--	--	--
226	226	--	--	226	--	f
403	403	403	--	--	--	f
566	566	566	--	--	--	--
--	--	401	--	401	--	--
--	--	437	--	--	--	--
--	--	437	--	--	--	--
372	541	488	388	388	--	--
785	785	785	785	785	--	--
862	981	862	--	--	--	--
--	--	380	--	380	--	--
295	--	--	--	--	--	--
811	780	--	--	--	--	--
947	1,040	947	--	--	--	--
947	1,040	947	--	--	--	--

Well number	Local name	County	Date
273633082174901	Florida Power and Light	Manatee	9-76
273718082315401	Willis Farm	Manatee	7-71
273718082315501	E.B.A.S.C.O.	Manatee	8-71
273724082305602	Borden Chemical	Manatee	6-80
273724082314103	Borden Chemical	Manatee	11-79
273728082313201	Borden Chemical	Manatee	3-66
273728082320101	Borden Chemical	Manatee	3-66
273732082312801	Borden Chemical	Manatee	5-66
273736082315503	Borden Chemical	Manatee	10-79
273738082312603	Borden Chemical	Manatee	11-79
273743082322301	Borden Chemical	Manatee	7-80
273745082321301	Borden Chemical	Manatee	4-80
273745082322201	Borden Chemical	Manatee	4-80
273747082315201	Borden Chemical	Manatee	11-79
273749082314003	Borden Chemical	Manatee	10-79
273753082324101	Manatee Port Authority #4	Manatee	1-83
273756082330201	Manatee Port Authority	Manatee	1-83
273757082325701	Manatee Port Authority	Manatee	1-83
273759082251901	Heller Corporation	Manatee	6-75
273811082250401	Isadora Hecht	Manatee	4-76
273815082074201	Weinstock	Manatee	
273817082194002	Florida Power and Light	Manatee	
270750082465401	TR15-1A	Pinellas	5-77
274745082443205	U.S. Geological Survey	Pinellas	1-73
274748082443905	U.S. Geological Survey	Pinellas	1-73
274751082444105	U.S. Geological Survey	Pinellas	1-73
274751082444406	U.S. Geological Survey	Pinellas	1-73
274753082444307	U.S. Geological Survey	Pinellas	1-73
274753082444706	U.S. Geological Survey	Pinellas	1-73
274754082444105	U.S. Geological Survey	Pinellas	1-73
274754082444505	U.S. Geological Survey	Pinellas	1-73
274922082443101	Pinellas County	Pinellas	2-73
275047082401601	City of St. Petersburg	Pinellas	1-72
275430082431401	TR13-2x	Pinellas	11-84
275458082464001	TR13-1x	Pinellas	6-85
275459082481202	U.S. Geological Survey	Pinellas	2-69
275500082444702	U.S. Geological Survey	Pinellas	2-69
275501082463102	U.S. Geological Survey	Pinellas	2-69
275625082474801	City of Clearwater Well #35	Pinellas	6-67
275704082475501	City of Clearwater Well #24	Pinellas	10-66

Electric	Type of log and depth logged, in feet below land-surface datum					
	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
--	--	59	--	--	--	--
539	578	--	--	--	--	--
840	935	838	--	--	--	--
46	130	74	525	92	--	--
37	147	59	123	132	--	--
262	--	--	262	--	--	--
--	--	--	470	470	--	--
780	--	--	780	780	--	--
36	148	49	131	142	--	--
112	149	46	113	112	--	--
542	556	555	499	499	--	--
185	219	202	--	--	--	--
49	--	21	--	--	--	--
101	247	190	208	228	--	--
136	154	50	--	--	--	--
490	586	588	--	550	--	--
335	--	238	--	--	--	--
449	449	450	--	430	--	--
816	780	--	--	--	--	--
720	856	760	805	--	--	--
835	830	830	--	--	--	--
878	878	884	--	--	--	--
134	134	134	134	134	--	--
--	17	--	--	--	--	--
--	17	--	--	--	--	--
--	22	--	--	--	--	--
--	47	--	--	--	--	--
--	46	--	--	--	--	--
--	45	--	--	--	--	--
--	16	--	--	--	--	--
--	17	--	--	--	--	--
434	434	--	430	345	--	--
130	188	130	--	--	--	--
--	--	552	--	552	--	--
531	531	531	531	--	--	--
--	78	--	--	--	--	--
--	71	--	--	--	--	--
--	66	--	--	--	--	--
--	290	--	246	--	--	--
172	229	192	--	--	--	--

Well number	Local name	County	Date
275711082442801	City of Clearwater Well #44	Pinellas	10-66
275713082474001	City of Clearwater Well #21	Pinellas	10-66
275713082474101	City of Clearwater	Pinellas	5-67
275753082433701	U.S. Geological Survey	Pinellas	2-67
275753082435301	Holiday Inn	Pinellas	6-67
275756082442801	City of Clearwater Well #43	Pinellas	6-67
275807082454802	U.S. Geological Survey	Pinellas	2-69
275807082474502	U.S. Geological Survey	Pinellas	1-69
275808082464802	U.S. Geological Survey	Pinellas	1-69
275810082422501	Biggins	Pinellas	7-67
275814082453101	City of Clearwater Well #32	Pinellas	6-67
275816082452301	#50	Pinellas	10-84
275842082430301	City of Clearwater	Pinellas	5-72
275843082474201	City of Clearwater Pinellas 246	Pinellas	10-66
275849082454601	City of Clearwater Well #34	Pinellas	10-66
275914082434102	U.S. Geological Survey	Pinellas	1-69
275914082472002	U.S. Geological Survey	Pinellas	1-69
275922082452002	U.S. Geological Survey	Pinellas	1-69
275925082421002	U.S. Geological Survey	Pinellas	1-69
275928082420701	Town of Safety Harbor	Pinellas	6-67
275933082462302	U.S. Geological Survey	Pinellas	1-69
275942082451601	E-11	Pinellas	10-84
280015082471201	City of Dunedin	Pinellas	7-67
280059082464902	U.S. Geological Survey	Pinellas	1-69
280107082444902	U.S. Geological Survey	Pinellas	1-69
280107082460402	U.S. Geological Survey	Pinellas	1-69
280108082433802	U.S. Geological Survey	Pinellas	1-69
280108082433901	Florida Forest Service	Pinellas	6-67
280118082434501	ROMP TR14-3	Pinellas	12-84
280118082434501	TR14-3	Pinellas	5-85
280121082453901	City of Dunedin #14	Pinellas	2-70
280122082471101	H. P. Hood and Sons	Pinellas	7-67
280123082423401	U.S. Geological Survey	Pinellas	11-71
280124082454601	City of Dunedin	Pinellas	2-70
280126082452301	City of Dunedin	Pinellas	2-70
280126082453301	City of Dunedin	Pinellas	2-70
280132082452801	TR14-2	Pinellas	10-84
280137082420301	U.S. Geological Survey	Pinellas	11-71
280137082421401	U.S. Geological Survey	Pinellas	11-71
280137082423401	U.S. Geological Survey	Pinellas	11-71

Electric	Type of log and depth logged, in feet below land-surface datum					
	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
184	--	184	220	--	--	--
208	275	--	236	--	--	--
281	281	281	--	--	--	--
461	544	451	479	--	--	--
119	276	--	232	--	--	--
224	281	288	260	--	--	--
--	92	--	--	--	--	--
--	37	--	--	--	--	--
--	41	--	--	--	--	--
115	194	170	--	--	--	--
213	275	--	217	--	--	--
465	--	465	--	--	--	--
338	376	337	338	--	--	--
228	203	--	179	--	--	--
--	--	282	227	--	--	--
--	48	--	--	--	--	--
--	30	--	--	--	--	--
--	64	--	--	--	--	--
--	69	--	--	--	--	--
180	280	--	246	--	--	--
--	38	--	--	--	--	--
580	580	--	--	--	--	--
90	148	90	131	--	--	--
--	70	--	--	--	--	--
--	58	--	--	--	--	--
--	31	--	--	--	--	--
--	80	--	--	--	--	--
--	104	--	17	--	--	--
300	303	--	--	--	--	--
325	324	325	328	328	--	--
194	258	190	185	--	--	--
200	256	200	--	--	--	--
--	64	--	--	--	--	--
130	190	126	--	--	--	--
104	168	104	116	--	--	--
152	220	152	170	--	--	--
461	461	461	461	461	--	--
--	59	--	--	--	--	--
--	50	--	--	--	--	--
--	61	--	--	--	--	--

Well number	Local name	County	Date
280143082424801	U.S. Geological Survey	Pinellas	11-71
280152082463301	City of Dunedin	Pinellas	7-67
280202082423401	U.S. Geological Survey	Pinellas	11-71
280228082465001	Oak Ridge Golf Course	Pinellas	8-77
280251082453002	U.S. Geological Survey	Pinellas	1-69
280254082441602	U.S. Geological Survey	Pinellas	10-68
280254082441604	U.S. Geological Survey	Pinellas	1-69
280254082463602	U.S. Geological Survey	Pinellas	1-69
280320082455201	Douglas Realty	Pinellas	7-67
280345082422102	U.S. Geological Survey	Pinellas	1-69
270518081593801	13-9	Polk	4-85
273559082251901	Heller Corporation	Polk	6-75
274518082011301	American Cyanamid Company	Polk	8-70
274547081420501	ROMP Well Site 45	Polk	1-78
274547081470901	ROMP 45-2	Polk	2-78
274547081470901	ROMP Well Site 45	Polk	5-75
274759081590601	I.M.C.	Polk	4-74
274805081595401	U.S. Geological Survey	Polk	8-73
274805081595402	U.S. Geological Survey	Polk	8-73
274807081595301	U.S. Geological Survey	Polk	8-73
274807081595302	U.S. Geological Survey	Polk	8-73
274807081595303	U.S. Geological Survey	Polk	8-73
274810081592801	I.M.C.	Polk	4-74
274814081594701	U.S. Geological Survey	Polk	8-73
274814081594702	U.S. Geological Survey	Polk	8-73
274819081592401	I.M.C.	Polk	4-74
274819081594301	U.S. Geological Survey	Polk	8-73
274819081594302	U.S. Geological Survey	Polk	8-73
274820081594201	U.S. Geological Survey	Polk	8-73
274820081594202	U.S. Geological Survey	Polk	8-73
274821081590301	I.M.C.	Polk	6-75
274821081591501	I.M.C.	Polk	4-74
274821081594101	I.M.C.	Polk	4-74
274823081590201	I.M.C.	Polk	6-74
274826081593301	U.S. Geological Survey	Polk	8-73
274826081593302	U.S. Geological Survey	Polk	8-73
274827081592201	I.M.C.	Polk	8-73
274827081593101	I.M.C.	Polk	6-74
274827081593201	U.S. Geological Survey	Polk	8-73
274827081593202	U.S. Geological Survey	Polk	8-73

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
--	56	--	--	--	--	--
--	228	182	--	--	--	--
--	44	--	--	--	--	--
168	--	--	--	--	--	--
--	27	--	--	--	--	--
329	386	350	330	--	--	--
--	43	--	--	--	--	--
--	18	--	--	--	--	--
110	190	--	155	--	--	--
--	27	--	--	--	--	--
709	709	709	709	709	--	--
811	780	--	--	--	--	--
1,242	--	1,144	1,495	1,495	--	--
319	320	320	--	320	--	--
680	753	680	--	649	--	--
182	182	182	--	182	--	--
295	--	--	--	274	--	--
--	27	--	--	--	--	--
--	22	--	--	--	--	--
--	36	--	--	--	--	--
--	22	--	--	--	--	--
--	10	--	--	--	--	--
140	--	174	--	--	--	f
--	25	--	--	--	--	--
--	16	--	--	--	--	--
127	185	--	--	--	--	f
--	25	--	--	--	--	--
--	16	--	--	--	--	--
--	28	--	--	--	--	--
--	25	--	--	--	--	--
176	--	176	--	--	--	f
861	--	168	--	--	--	f
81	--	114	--	--	--	f
184	--	262	--	--	--	f
--	26	--	--	--	--	--
--	16	--	--	--	--	--
201	311	198	--	--	--	--
134	--	152	--	--	--	--
--	22	--	--	--	--	--
--	25	--	--	--	--	--

Well number	Local name	County	Date
274827081593203	U.S. Geological Survey	Polk	8-73
274830081591501	I.M.C.	Polk	6-74
274832081590401	I.M.C.	Polk	6-74
274835081593601	I.M.C.	Polk	6-74
274835081595501	U.S. Geological Survey	Polk	8-73
274835081595502	U.S. Geological Survey	Polk	8-73
274842082013801	I.M.C.	Polk	10-72
274851082011201	I.M.C.	Polk	9-72
274852082020801	I.M.C.	Polk	10-72
274853082012601	I.M.C.	Polk	10-72
274853082031801	I.M.C.	Polk	10-72
274854082021201	I.M.C.	Polk	8-74
274855082014501	I.M.C.	Polk	2-74
274855082022501	I.M.C.	Polk	11-72
274858082025501	I.M.C.	Polk	11-72
274902082005701	I.M.C.	Polk	9-72
274902082022101	I.M.C.	Polk	2-74
274903082014201	I.M.C.	Polk	10-72
274907082023201	I.M.C.	Polk	11-72
274908082004201	I.M.C.	Polk	10-72
274908082021101	I.M.C.	Polk	9-72
274918082021401	I.M.C.	Polk	10-72
274918082021401	I.M.C.	Polk	11-72
274920082014501	I.M.C.	Polk	9-72
274920082014502	I.M.C.	Polk	2-74
274923082023601	I.M.C.	Polk	11-72
274924082014101	I.M.C.	Polk	2-74
274925081490201	U.S. Geological Survey	Polk	8-73
274925081491301	U.S. Geological Survey	Polk	8-73
274925082014501	I.M.C.	Polk	9-72
274925082021401	Int. Min. Chem.	Polk	11-72
274929081470301	U.S. Geological Survey	Polk	8-73
274929081472701	U.S. Geological Survey	Polk	8-73
274929081473901	U.S. Geological Survey	Polk	8-73
274932081422601		Polk	3-76
275044081471002	I.M.C. Clear Springs Mine	Polk	11-79
275114081471002	I.M.C. Clear Springs Mine	Polk	12-79
275123081475102	I.M.C. Clear Springs Mine	Polk	11-79
275124081494201	I.M.C.	Polk	5-74
275141081495201	I.M.C.	Polk	5-74

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
--	16	--	--	--	--	--
175	256	260	--	--	--	f
394	--	396	--	--	--	f
137	--	115	--	--	--	f
--	27	--	--	--	--	--
--	15	--	--	--	--	--
252	--	250	--	--	--	f
207	--	205	--	--	--	f
192	--	190	--	--	--	f
184	--	182	--	--	--	f
200	--	197	--	--	--	f
161	--	177	--	--	--	f
186	--	197	--	--	--	f
124	--	122	--	--	--	--
184	--	182	--	--	--	f
208	--	205	--	--	--	f
190	--	168	--	--	--	f
211	--	209	--	--	--	f
199	--	197	--	--	--	f
248	--	246	--	--	--	f
175	--	209	--	--	--	--
221	--	219	--	--	--	f
221	--	219	--	--	--	--
194	--	192	--	--	--	f
199	--	218	--	--	--	f
326	--	314	--	--	--	f
814	--	219	--	--	--	f
--	38	--	--	--	--	--
--	16	--	--	--	--	--
167	--	197	--	--	--	f
475	--	453	--	--	--	f
--	21	--	--	--	--	--
--	56	--	--	--	--	--
--	36	--	--	--	--	--
--	--	69	--	--	--	--
56	69	51	32	30	--	--
35	69	41	39	51	--	--
--	45	37	--	37	--	--
187	222	--	140	--	--	--
47	91	--	--	--	--	--

Well number	Local name	County	Date
275210081502501	I.M.C.	Polk	5-74
275232081471302	I.M.C. Clear Springs Mine	Polk	12-79
275242081494401	Farm Bureau	Polk	5-74
275243081500601	Chesterfield Smith	Polk	5-74
275245081482801	I.M.C.	Polk	5-74
275253081495201	Newell	Polk	5-74
275307081504001	John Gibson	Polk	5-74
275314081514201	U.S. Geological Survey	Polk	2-75
275314081514201	ROMP 59	Polk	1-77
275343081472303	U.S. Geological Survey & I.M.C.	Polk	6-80
275349081513801	Kuder Citrus Company	Polk	10-69
275349081513801	Kuder Citrus Company	Polk	10-69
275350081514201	Kuder Citrus Company	Polk	11-69
275353081522401	U.S.S. Agrichem	Polk	11-79
275353081524501	U.S.S. Agrichem	Polk	6-80
275356081530401	U.S.S. Agrichem	Polk	11-79
275406081523703	U.S. Steel	Polk	11-79
275406081523703	U.S.S. Agrichem	Polk	6-80
275408081595701	Kaiser Aluminum Company	Polk	4-76
275412081372101	ROMP 57	Polk	12-80
275414081522603	U.S. Steel	Polk	11-79
275419081525803	U.S. Steel	Polk	11-79
275430082000401	Kaiser Aluminum Company	Polk	11-76
275432081524303	U.S. Steel	Polk	11-79
275433081465501	Ed Thompson	Polk	3-76
275446081504003	U.S. Geological Survey	Polk	6-80
275539081475601	V. C. Corporation	Polk	2-71
280244081570801	City of Lakeland	Polk	3-68
280416081571901	City of Lakeland	Polk	3-69
280420081570701	City of Lakeland	Polk	2-69
280502081593701	13-8	Polk	4-85
280518081575801	City of Lakeland	Polk	4-68
280529081581102	Carpenter Home	Polk	10-71
280537081573802	Carpenter Home	Polk	10-71
280542081580302	Carpenter Home	Polk	10-71
280548081575701	Carpenter Home	Polk	10-71
280550081580401	Carpenter Home	Polk	10-71
280554081581001	Carpenter Home	Polk	10-71
280555081580303	Carpenter Home	Polk	10-71
280555081580306	Carpenter Home	Polk	10-71

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
55	91	--	--	--	--	--
37	166	53	26	40	--	--
101	202	--	--	66	--	--
67	119	83	--	60	--	--
62	98	--	--	--	--	--
117	117	--	--	40	--	--
67	119	--	--	74	--	--
1,223	1,412	1,234	389	--	--	--
1,040	--	1,040	1,040	--	--	--
73	90	30	--	40	--	--
256	--	256	326	326	--	--
256	--	256	326	326	--	--
482	660	660	610	610	--	--
39	115	59	39	59	--	--
535	677	672	585	--	--	--
74	--	72	37	59	--	--
76	--	76	--	24	--	--
495	128	110	82	--	--	--
--	479	444	--	650	--	n
620	634	620	620	634	--	--
25	99	25	21	40	--	--
43	112	56	--	56	--	--
--	4,586	583	--	4,212	--	n
32	96	42	22	--	--	--
584	94	95	--	--	--	--
51	78	52	--	40	--	--
584	--	--	--	--	--	--
811	1,167	811	1,067	--	--	--
451	636	636	550	550	--	--
248	908	248	842	842	--	--
--	--	440	--	440	--	--
603	--	603	739	739	--	--
--	19	--	--	--	--	--
--	17	--	--	--	--	--
--	18	--	--	--	--	--
--	22	--	--	--	--	--
--	72	--	--	--	--	--
--	37	--	--	--	--	--
--	32	--	--	--	--	--
--	22	--	--	--	--	--

Well number	Local name	County	Date
280559081580201	Carpenter Home	Polk	10-71
280559081582301	Carpenter Home	Polk	10-71
280604081575601	Carpenter Home	Polk	10-71
280723081485001	U.S. Geological Survey	Polk	10-74
265527082213702	Englewood Beach	Sarasota	8-72
265531082194801	SWFWMD TR3-3	Sarasota	2-86
265627082205401	Englewood Water District	Sarasota	4-85
265645082195701	Aldersgate Development	Sarasota	7-72
265653082190301	Englewood	Sarasota	2-76
265702082201101	Aldersgate Development	Sarasota	7-72
265710082205101	Englewood	Sarasota	4-76
265712082205701	Englewood	Sarasota	6-74
265714082195001	City of Englewood	Sarasota	5-71
265731082201101	Englewood Water District	Sarasota	6-78
265757082202801	Englewood Water District	Sarasota	6-74
265801082205601	George Plumberg	Sarasota	5-78
265808082201301	City of Englewood	Sarasota	5-71
265808082202501	City of Englewood	Sarasota	5-71
265809082194001	City of Englewood	Sarasota	5-71
265810082195501	City of Englewood	Sarasota	5-71
265816082193501	City of Englewood	Sarasota	5-71
265819082195601	City of Englewood	Sarasota	5-71
265820082192701	City of Englewood	Sarasota	5-71
265823082194201	City of Englewood	Sarasota	5-71
265826082194801	City of Englewood	Sarasota	5-71
265826082201301	City of Englewood	Sarasota	5-71
265828082192701	City of Englewood	Sarasota	5-71
265828082195301	City of Englewood	Sarasota	5-71
265833082200201	City of Englewood	Sarasota	5-71
265834082200801	City of Englewood	Sarasota	5-71
265834082202501	City of Englewood	Sarasota	5-71
265927082112701	Englewood Water District	Sarasota	6-74
265928082205201	21-468	Sarasota	3-84
265937082241101	Manasota Key	Sarasota	6-67
265944082175401	U.S. Geological Survey	Sarasota	5-66
270015082240201	Old Orange Grove near Englewood	Sarasota	8-84
270018082201301	Englewood Water District	Sarasota	7-76
270018082210901	Englewood Water District	Sarasota	6-74
270019082213701	Englewood Water District	Sarasota	6-74
270021082221301	Englewood	Sarasota	6-74

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
--	25	--	--	--	--	--
--	18	--	--	--	--	--
--	10	--	--	--	--	--
163	--	--	--	--	--	--
312	312	312	--	--	--	--
--	1,062	--	--	--	--	--
372	372	370	--	--	--	--
--	141	--	--	--	--	--
162	316	309	--	--	--	--
20	91	17	--	--	--	--
256	293	--	--	--	--	--
77	101	64	--	--	--	--
--	42	--	--	--	--	--
104	148	114	131	138	--	--
54	84	--	--	--	--	--
--	74	--	--	--	--	--
--	53	--	--	--	--	--
--	44	--	--	--	--	--
--	58	--	--	--	--	--
--	50	--	--	--	--	--
--	43	--	--	--	--	--
--	47	--	--	--	--	--
--	47	--	--	--	--	--
--	44	--	--	--	--	--
--	43	--	--	--	--	--
--	84	--	--	--	--	--
--	41	--	--	--	--	--
--	45	--	--	--	--	--
--	47	--	--	--	--	--
--	43	--	--	--	--	--
--	41	--	--	--	--	--
62	104	70	--	--	--	--
--	--	109	--	109	--	--
260	260	--	--	--	--	--
77	105	--	--	--	--	--
234	286	266	250	285	--	--
79	112	96	--	--	--	--
45	71	56	--	--	--	--
69	86	66	--	--	--	--
54	76	58	--	--	--	--

Well number	Local name	County	Date
270032082205801	Venetia Inc.	Sarasota	4-81
270036082213401	Englewood	Sarasota	2-76
270036082214101	Pete McElmurray	Sarasota	2-76
270041082230401	Dolphin Bath and Racquet Club	Sarasota	6-78
270051082243201	Mr. Turner	Sarasota	12-71
270052082242601	Jacob France	Sarasota	10-72
270057082210501	Venetia Inc.	Sarasota	4-81
270101082231201	Lester Fleming	Sarasota	6-72
270102082231901	Boldt	Sarasota	1-72
270112082201201	Englewood Water District	Sarasota	7-76
270112082213301	Englewood Water District	Sarasota	8-79
270113082223301	Englewood Water District	Sarasota	8-79
270137082235301	U.S. Geological Survey	Sarasota	3-66
270140082223601	Venetia Inc.	Sarasota	6-72
270144082223301	Venetia Inc.	Sarasota	6-72
270153082212601	Jack Berry	Sarasota	2-84
270153082212601	21-467	Sarasota	3-84
270156082234401	Englewood Disposal	Sarasota	12-71
270159082033101	General Development Corporation	Sarasota	11-65
270203082210101	Venetia Inc.	Sarasota	5-72
270203082213701	Venetia Inc.	Sarasota	5-72
270207082122301	General Development Corporation	Sarasota	11-65
270207082212301	21-461	Sarasota	2-84
270207082212401	21-462	Sarasota	2-84
270209082243201	Trautman	Sarasota	4-78
270219082185801	Manatee Junior College	Sarasota	3-84
270220082082101	General Development Corporation	Sarasota	3-60
270221082082001	General Development Corporation	Sarasota	12-68
270223082185701	Manatee Junior College	Sarasota	3-84
270223082185801	Manatee Junior College	Sarasota	3-84
270226082254301	City of Venice	Sarasota	11-73
270254082240101	Sarasota County	Sarasota	11-65
270257082223201	Venice Gardens Utilities	Sarasota	6-79
270319082160601	Diegel Jackman	Sarasota	10-78
270320082225001	Venice East	Sarasota	5-77
270330082222901	Venice East	Sarasota	10-70
270332082143801	Jockey Club Entrance	Sarasota	10-78
270333082214301	Green Tree #1	Sarasota	8-72
270335082094801	General Development Corporation	Sarasota	3-60
270343082141901	Jockey Recreation Club	Sarasota	10-78

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
253	251	249	194	--	--	--
48	62	63	--	--	--	--
54	49	48	--	--	--	--
77	121	120	--	--	--	--
127	174	124	--	--	--	--
504	694	502	--	--	--	--
190	183	186	165	180	--	--
24	67	22	--	--	--	--
688	726	687	--	--	--	--
58	115	58	--	--	--	--
--	60	44	--	--	--	--
121	146	99	--	--	--	--
297	297	--	297	--	--	--
263	463	261	--	--	--	--
253	--	251	--	--	--	--
213	251	251	251	606	--	--
610	610	610	610	610	--	--
627	627	--	--	--	--	--
428	--	360	--	--	--	--
103	309	102	--	311	--	--
403	606	401	--	--	--	--
74	--	--	--	--	--	--
--	--	313	313	313	--	--
600	--	600	600	600	600	--
--	48	--	--	--	--	--
186	272	272	176	272	--	--
628	--	--	--	--	--	--
--	--	628	628	--	--	f
138	156	148	138	156	--	--
119	207	193	124	114	--	--
88	--	88	78	--	--	--
142	142	142	--	--	--	--
192	193	156	--	--	--	--
65	79	78	--	--	--	--
--	224	224	--	224	--	--
726	726	726	--	--	--	--
105	105	105	--	--	--	--
--	300	300	--	--	--	--
418	--	--	--	--	--	--
80	102	99	96	--	--	--

Well number	Local name	County	Date
270344082224701	Venice East #3	Sarasota	4-74
270347082225301	Venice East #4	Sarasota	4-74
270352082223801	Venice East #2	Sarasota	4-74
270401082215601	Plantation	Sarasota	6-81
270401082220401	Plantation	Sarasota	6-81
270401082220501	Plantation	Sarasota	6-81
270408082223801	Venice East #1	Sarasota	4-74
270413082230201	Venice Gardens Utilities	Sarasota	10-70
270416082244801	Venice Gardens Utilities	Sarasota	2-73
270418082244601	Venice Gardens Utilities	Sarasota	2-73
270422082231001	Venice Gardens Utilities	Sarasota	7-72
270430082231701	Venice Gardens Utilities	Sarasota	7-72
270502082235901		Sarasota	6-79
270515082224501	Center Road	Sarasota	5-77
270533082260201	City of Venice #21	Sarasota	6-62
270534082260601	City of Venice	Sarasota	7-62
270537082260201	City of Venice	Sarasota	7-62
270538080053501	City of Venice #32	Sarasota	7-62
270538082250401	T-3 Venice	Sarasota	11-70
270538082254601	City of Venice #27	Sarasota	6-62
270538082254801	City of Venice #26	Sarasota	6-62
270538082255201	City of Venice #25	Sarasota	7-62
270538082255701	City of Venice #23	Sarasota	6-62
270538082255801	City of Venice #22	Sarasota	7-62
270538082260301	City of Venice #2	Sarasota	7-62
270538082260701	City of Venice #18	Sarasota	6-62
270539082234301	L. Ellis	Sarasota	7-72
270539082260401	City of Venice #2N	Sarasota	6-62
270540082261701	U.S. Geological Survey	Sarasota	7-63
270541082260601	City of Venice #36 South	Sarasota	7-62
270541082260801	City of Venice #17	Sarasota	6-62
270542082260701	City of Venice #3N	Sarasota	7-62
270542082261701	U.S. Geological Survey #37	Sarasota	7-63
270542082261801	U.S. Geological Survey #38	Sarasota	7-63
270543082260801	City of Venice 15E	Sarasota	6-62
270543082260901	City of Venice #16	Sarasota	6-62
270543082261201	City of Venice #15	Sarasota	6-62
270543082261901	City of Venice #36	Sarasota	7-63
270545082261301	City of Venice #14S	Sarasota	6-62
270547082261301	City of Venice #14N	Sarasota	7-62

Electric	Type of log and depth logged, in feet below land-surface datum					
	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
724	724	722	--	--	--	--
327	341	325	--	--	--	--
37	--	--	--	--	--	--
231	256	254	219	--	--	f
215	250	242	215	--	--	--
168	171	156	136	--	--	--
217	214	214	--	--	--	--
433	433	--	--	--	--	--
85	141	82	--	--	--	--
73	--	71	--	--	--	--
59	120	57	--	--	--	--
52	--	51	--	--	--	--
--	695	--	--	--	--	--
--	218	220	--	--	--	--
144	144	--	--	--	--	--
66	--	--	--	--	--	--
92	92	--	--	--	--	--
59	60	--	--	--	--	--
136	136	136	--	--	--	--
118	118	--	--	--	--	--
118	118	--	--	--	--	--
140	140	--	--	--	--	--
120	120	--	--	--	--	--
125	120	--	--	--	--	--
67	--	--	--	--	--	--
140	140	--	--	--	--	--
34	93	32	--	--	--	--
100	100	--	--	--	--	--
22	--	--	--	--	--	--
47	--	--	--	--	--	--
114	114	--	--	--	--	--
109	--	--	--	--	--	--
43	--	--	--	--	--	--
163	163	--	--	--	--	--
105	105	--	--	--	--	--
111	111	--	--	--	--	--
98	98	--	--	--	--	--
68	--	--	--	--	--	--
124	124	--	--	--	--	--
109	--	--	--	--	--	--

Well number	Local name	County	Date
270549082261501	City of Venice #13S	Sarasota	7-62
270550082261601	City of Venice #13N	Sarasota	7-63
270551082260801	City of Venice #4N	Sarasota	7-62
270551082261601	City of Venice #12S	Sarasota	7-62
270551082261801	City of Venice #10	Sarasota	6-62
270551082262201	City of Venice #9N	Sarasota	7-62
270552082260901	City of Venice #5S	Sarasota	7-62
270552082261701	City of Venice #12S	Sarasota	7-62
270553082250301	City of Venice #38	Sarasota	12-63
270553082260801	City of Venice #5	Sarasota	6-62
270553082261101	City of Venice #5N	Sarasota	7-62
270553082261201	City of Venice #6	Sarasota	6-62
270553082261701	City of Venice #12N	Sarasota	7-62
270553082261801	City of Venice #115	Sarasota	6-62
270554082261201	City of Venice #75	Sarasota	7-62
270554082261801	City of Venice #11N	Sarasota	7-62
270556082240301	Carl F. Kunze, Jr.	Sarasota	5-72
270556082261207	City of Venice #7N	Sarasota	7-62
270556082262401	City of Venice	Sarasota	1-74
270557082234601	Jerome Elles	Sarasota	9-67
270557082240601	City of Venice #6	Sarasota	7-71
270557082241001	City of Venice #9	Sarasota	7-71
270557082241401	City of Venice #8	Sarasota	7-71
270557082241701	City of Venice	Sarasota	7-71
270557082241801	City of Venice #7	Sarasota	7-71
270557082242201	U.S. Geological Survey #4	Sarasota	11-70
270557082242301	City of Venice #5	Sarasota	5-71
270557082242301	City of Venice #5S	Sarasota	5-71
270557082242801	City of Venice #15	Sarasota	7-71
270557082243301	City of Venice #14	Sarasota	7-71
270557082243701	City of Venice #13	Sarasota	10-71
270557082244201	City of Venice #16	Sarasota	8-71
270557082244601	City of Venice #4	Sarasota	5-71
270557082244601	Venice Ranch	Sarasota	11-84
270557082245001	City of Venice #12	Sarasota	7-81
270557082245401	City of Venice #11	Sarasota	7-71
270557082245801	City of Venice #10	Sarasota	7-71
270557082251201	City of Venice #37	Sarasota	12-63
270557082253801	City of Venice #1	Sarasota	5-71
270558082235301	Carl F. Kunze #58	Sarasota	5-72

Electric	Type of log and depth logged, in feet below land-surface datum					
	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
33	--	--	--	--	--	--
108	--	--	--	--	--	--
110	--	--	--	--	--	--
57	--	--	--	--	--	--
113	113	--	--	--	--	--
105	--	--	--	--	--	--
35	--	--	--	--	--	--
57	--	--	--	--	--	--
99	99	--	--	--	--	--
114	114	--	--	--	--	--
59	--	--	--	--	--	--
112	112	--	--	--	--	--
108	--	--	--	--	--	--
134	134	--	--	--	--	--
105	--	--	--	--	--	--
104	--	--	--	--	--	--
317	347	347	--	--	--	--
108	--	--	--	--	--	--
66	264	84	--	--	--	--
390	390	390	--	--	--	--
--	104	24	--	--	--	--
--	104	33	--	--	--	--
85	143	85	--	--	--	--
58	125	54	--	--	--	--
58	125	54	--	--	--	--
129	129	129	--	--	--	--
--	140	87	--	--	--	--
--	140	87	--	--	--	--
78	141	77	--	--	--	--
74	140	76	--	--	--	--
140	140	61	--	--	--	--
68	140	67	--	--	--	--
49	120	50	--	--	--	--
--	--	396	--	396	--	--
67	143	67	--	--	--	--
105	183	106	--	--	--	--
98	142	116	--	--	--	--
129	129	--	--	--	--	--
84	132	133	--	--	--	--
322	397	317	--	--	--	--

Well number	Local name	County	Date
270558082251801	City of Venice #36	Sarasota	12-63
270558082252301	City of Venice #35	Sarasota	12-63
270558082253201	City of Venice #34	Sarasota	12-63
270558082253701	City of Venice #33	Sarasota	7-62
270558082261901	City of Venice #9N	Sarasota	7-62
270600082222001	Moore Well	Sarasota	6-77
270600082222501	Cross-U-Trails	Sarasota	6-77
270600082232001	Cleaver's Well	Sarasota	6-77
270602082260301	W.C.I.N.D.	Sarasota	7-65
270602082260501	Blackburn Quarters	Sarasota	6-72
270602082261501	Artesian Well	Sarasota	6-62
270603082250301	City of Venice	Sarasota	12-63
270603082261701	Artesian Well	Sarasota	6-62
270607082225001	Elephant Barn Well	Sarasota	12-63
270607082262801	City of Venice	Sarasota	1-74
270608082240201	#40	Sarasota	12-63
270608082245801	#42	Sarasota	12-63
270609082254501	Ridgewood Mobile Home Park	Sarasota	9-68
270610082225601	Constantine	Sarasota	6-79
2706110822260101	City of Venice	Sarasota	2-83
270613082240201	City of Venice #41	Sarasota	12-63
270613082245001	City of Venice #52	Sarasota	2-69
270613082252301	U.S. Geological Survey T/W #2	Sarasota	11-70
270618082244701	Capri Isles	Sarasota	7-71
270620082214701	Venice	Sarasota	7-78
270622082254101	Bay Indies Park	Sarasota	11-72
270622082254101	Bay Indies Park	Sarasota	11-72
270630082231801	George Woods	Sarasota	10-63
270630082233701	George Woods	Sarasota	10-63
270640082235601	Tennis Club	Sarasota	6-79
270640082240201	George Woods	Sarasota	10-63
270641082245501	U.S. Geological Survey T/W #1	Sarasota	10-70
270642082253801	Bay Indies P-2	Sarasota	9-74
270650082260101	Venice By-Way Well	Sarasota	10-63
270654082222001	Pond Well near Everglade Estate	Sarasota	8-84
270657082270401	J. Biller	Sarasota	7-77
270659082233901	Fox Lee Farms	Sarasota	8-84
270705082204001	21-463	Sarasota	2-84
270705082222201	High Point Road Well	Sarasota	8-80
270709082270801		Sarasota	7-63

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
50	50	--	--	--	--	--
128	128	--	--	--	--	--
99	99	--	--	--	--	--
131	131	--	--	--	--	--
105	--	--	--	--	--	--
--	377	378	--	378	--	--
--	421	421	--	422	--	--
--	261	262	--	262	--	--
453	125	--	--	--	--	--
414	410	--	--	--	--	--
124	124	--	--	--	--	--
115	115	--	--	--	--	--
304	300	382	--	--	--	--
429	429	--	--	--	--	--
266	264	264	--	--	--	--
128	128	--	--	--	--	--
130	130	--	--	--	--	--
380	380	--	380	--	--	f
384	385	369	379	379	--	--
328	336	338	--	--	--	--
130	130	--	--	--	--	--
127	127	127	127	127	--	f
110	110	110	--	--	--	--
--	256	--	--	--	--	--
342	352	352	357	--	--	--
49	241	47	--	--	--	--
49	241	47	--	--	--	--
281	281	--	--	--	--	--
307	307	--	--	--	--	--
--	--	382	--	--	--	--
401	401	--	--	--	--	--
204	204	--	--	--	--	--
670	670	--	--	--	--	--
381	381	--	--	--	--	--
424	460	454	445	456	--	--
442	442	--	--	443	--	--
--	186	186	178	188	--	--
472	--	472	472	472	--	--
303	356	356	319	356	--	--
245	245	--	--	--	--	--

Well number	Local name	County	Date
270718082155201	U.S. Geological Survey	Sarasota	5-66
270731082271401		Sarasota	7-63
270731082341401		Sarasota	7-63
270732082271201		Sarasota	7-63
270757082270101		Sarasota	4-78
270808082270801	TR5-1	Sarasota	3-82
270815082221201	Henry Ranch	Sarasota	4-81
270815082235001	Stephen T. Deans	Sarasota	4-81
270822082231101	Virginia Burkett (Henry Ranch)	Sarasota	4-81
270839082274201	Spanish Lake	Sarasota	4-74
270839082274301	Spanish Lake	Sarasota	4-74
270840082225101	Henry Ranch	Sarasota	4-81
270846082274301	Spanish Lake	Sarasota	4-74
270904082281701	Renata Barbarigo	Sarasota	4-78
270919082234201	TR5-2	Sarasota	6-84
270931082255901	Ewing Ranch Well	Sarasota	8-84
270932082283501	Sorrento Shores	Sarasota	11-85
270946082282301	Sorrento Shores	Sarasota	12-71
270952082095901	Mabry Carlton	Sarasota	2-81
270959082203001	MacArthur Tract	Sarasota	10-80
270959082203001	ROMP 19	Sarasota	10-80
271002082283301	Sorrento Shores	Sarasota	12-71
271005082195001	MacArthur Tract	Sarasota	7-80
271007082283901	State of Florida	Sarasota	7-79
271021082151601	MacArthur Tract	Sarasota	6-80
271021082151601	ROMP 19x	Sarasota	8-80
271037082075401	Mabry Carlton	Sarasota	2-81
271052082175601	MacArthur Tract	Sarasota	6-85
271108082100301	Mabry Carlton	Sarasota	2-81
271117082074001	Mabry Carlton	Sarasota	2-81
271118082082401	Mabry Carlton	Sarasota	2-81
271118082285301	U.S. Geological Survey	Sarasota	1-66
271122082074601	Mabry Carlton	Sarasota	5-79
271127082094401	Mabry Carlton	Sarasota	5-66
271130082064901	Mabry Carlton	Sarasota	10-78
271135082280101	Rib Walker	Sarasota	6-65
271137082074802	SWFWMD	Sarasota	10-80
271137082074802	ROMP 18-1	Sarasota	7-79
271137082074802	SWFWMD ROMP 18-2	Sarasota	12-80
271138082074801	Mabry Carlton	Sarasota	5-79

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
87	342	84	--	--	--	--
480	480	--	--	--	--	--
480	480	--	--	--	--	--
238	238	--	--	--	--	--
53	73	78	86	--	--	--
629	649	282	553	--	--	--
166	166	168	--	--	--	--
353	357	357	343	--	--	--
282	282	281	266	--	--	--
168	--	--	--	--	--	--
88	90	50	--	--	--	--
58	72	74	--	--	--	--
209	222	221	--	--	--	--
126	117	95	--	--	--	--
--	--	--	--	--	--	--
231	252	249	226	252	--	--
659	665	632	599	--	--	--
65	235	65	--	--	--	--
225	227	276	262	--	--	--
356	418	391	342	362	--	f
356	--	--	--	--	--	f
79	333	79	--	--	--	--
83	--	78	--	--	--	--
337	--	155	--	--	--	--
348	415	69	359	359	--	f
389	--	--	--	--	--	f
1,288	1,354	1,356	1,298	1,298	--	--
360	397	400	256	--	--	--
422	445	446	418	--	--	--
543	569	569	532	--	--	--
286	296	297	--	--	--	--
151	--	--	--	--	--	--
230	285	255	267	--	--	--
422	422	422	422	--	--	--
400	447	460	400	400	--	--
720	--	--	--	--	--	--
--	--	--	420	--	--	--
940	940	910	910	910	--	--
--	820	--	420	--	--	--
213	246	221	228	--	--	--

Well number	Local name	County	Date
271207082075201	Mabry Carlton	Sarasota	2-81
271208082284901	Palmer Corporation	Sarasota	2-88
271211082102601	Mabry Carlton	Sarasota	2-81
271212082290801	Palmer Corporation	Sarasota	2-82
271218082081801	Mabry Carlton	Sarasota	3-81
271222082042301	Cecil Daughtrey	Sarasota	5-72
271222082295201	Sarasota Historical Society	Sarasota	2-82
271225082295301	Oaks Property	Sarasota	2-82
271226082105301	Mabry Carlton	Sarasota	2-81
271226082294601	Oaks Property	Sarasota	2-82
271227082084801	Mabry Carlton	Sarasota	3-81
271227082103001	Mabry Carlton	Sarasota	2-81
271328082210701	Buck Hawkins	Sarasota	5-66
271329082205601	State of Florida	Sarasota	7-73
271348082221801	Buck Hawkins	Sarasota	5-66
271351082301701	Eide	Sarasota	1-82
271353082295701	Will Banks	Sarasota	11-73
271416082284301	Palmer Corporation	Sarasota	4-74
271420082225701	Buck Hawkins	Sarasota	5-66
271428082305301	Lowell Selders	Sarasota	4-78
271456082230901	U.S. Geological Survey	Sarasota	2-66
271514082302401	Gulf Gate Golf Course	Sarasota	4-65
271520082320001	Siesta Key	Sarasota	5-77
271524082272801	Sunrise Golf Course	Sarasota	3-84
271524082321201	Ray Littrell	Sarasota	7-63
271525082272801	Sunrise Utilities	Sarasota	5-83
271527082301701	Gulf Gate Corporation	Sarasota	5-65
271544082290801	Palmer Corporation	Sarasota	4-74
271547082290301	Palmer Corporation	Sarasota	4-74
271550082320501	Guest-Meadowood Street	Sarasota	12-78
271601082325901	TR6-1	Sarasota	10-78
271601082330201	TR6-1	Sarasota	12-78
271603082323101	Gulf and Bay Club, Siesta Key	Sarasota	7-63
271608082280201	U.S. Geological Survey	Sarasota	8-66
271609082252401	Jim Mosbey	Sarasota	10-78
271609082324501	Royal Palms Harbor	Sarasota	6-74
271610082323301	Boatyard	Sarasota	4-62
271613082300201	Earl Beach	Sarasota	7-64
271614082304201	John Thode	Sarasota	12-63
271614082304301		Sarasota	8-84

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
256	283	283	266	--	--	--
239	241	240	--	--	--	--
760	652	644	620	--	--	--
430	492	491	--	--	--	--
242	369	252	252	--	--	--
1,319	--	--	--	--	--	--
224	213	213	--	--	--	--
73	--	--	--	--	--	--
510	569	565	512	--	--	--
614	615	614	598	--	--	--
340	364	365	328	--	--	--
814	866	867	810	--	--	--
69	105	--	--	--	--	--
576	600	--	--	--	--	--
134	182	--	--	--	--	--
139	--	152	--	--	--	--
357	267	367	--	--	--	--
110	127	--	--	--	--	--
880	880	--	--	--	--	--
44	72	64	67	--	--	--
47	--	--	--	--	--	--
644	--	--	--	--	--	--
--	391	391	--	391	--	--
333	451	372	413	447	--	--
418	418	--	--	--	--	--
301	306	306	--	--	--	--
499	--	--	--	--	--	--
303	--	--	--	--	--	--
358	418	318	--	--	--	--
61	97	--	--	--	--	--
561	561	542	--	--	--	--
--	307	--	--	--	--	--
262	262	--	--	--	--	--
44	98	38	--	--	--	--
111	145	138	128	--	--	--
278	335	278	316	--	--	--
515	515	--	--	--	--	--
601	601	--	--	--	--	--
705	705	--	--	--	--	--
--	--	684	--	--	--	--

Well number	Local name	County	Date
271619082334101	Travel By the Sea	Sarasota	12-74
271620082233001	Florida Cities Utilities	Sarasota	1-68
271620082334901	B. P. George	Sarasota	10-68
271623082314201	Bill Chapman	Sarasota	8-63
271623082335601	Terrence Towers	Sarasota	3-71
271624082314801	Novak Realty Company	Sarasota	8-63
271624082333801	Archibald Water System	Sarasota	7-63
271625082325501	Siesta Key School	Sarasota	10-64
271633082330401	S.K.U.A.	Sarasota	7-80
271636082330201	S.U.K.A.	Sarasota	7-80
271642082292901	Arapaho	Sarasota	12-74
271642082330601	Siesta Isles Water System	Sarasota	12-63
271644082330001	Hidden Harbor Association	Sarasota	8-72
271649082270701	Albritton Groups, Inc.	Sarasota	11-81
271649082271601	Albritton Groups, Inc.	Sarasota	11-81
271649082271602	Albritton Groups, Inc.	Sarasota	1-82
271654082331101	Sarasota County	Sarasota	5-71
271659082313001	Phillip Anderson	Sarasota	5-66
271709082295401		Sarasota	7-63
271714082321901	21-1004	Sarasota	3-85
271728082274201	Dunhill Property	Sarasota	11-72
271737082314601	Chill Plaza	Sarasota	12-85
271743082281901	Ivey Taylor	Sarasota	
271744082290301	Strathmore Villa	Sarasota	5-71
271747082320401	Thompson-Hinson	Sarasota	11-78
271749082285901	Southeast Plaza	Sarasota	5-65
271751082305401	Thompson-Lisbon	Sarasota	11-78
271753082272301	Dunnhill Property	Sarasota	11-72
271757082241301	U.S. Geological Survey	Sarasota	7-66
271803082163701	O. F. Smith Ranch	Sarasota	4-65
271803082284101	Busti Drive	Sarasota	7-78
271806082313801	Sarasota Board of Education	Sarasota	12-63
271808082341401	Key Towers	Sarasota	5-72
271809082341501	Ledo Towers	Sarasota	1-68
271816082159901	Flying S Ranch	Sarasota	5-62
271824082283601	Guest-Avert Avenue	Sarasota	7-78
271830082294801	Phillips Petroleum	Sarasota	7-63
271837082281401	Egological Utilities	Sarasota	9-72
271845082304301	Morrison	Sarasota	10-83
271846082250901	Sarasota Golf Club (private)	Sarasota	7-78

Electric	Type of log and depth logged, in feet below land-surface datum					
	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
306	306	306	--	--	--	--
380	380	380	--	--	--	--
194	--	--	--	--	--	--
314	314	--	--	--	--	--
1,338	1,338	--	1,338	--	--	--
230	230	--	--	--	--	--
151	151	--	--	--	--	--
292	292	--	--	--	--	--
244	466	449	--	--	--	--
473	475	478	--	--	--	--
563	563	563	--	--	--	--
233	233	--	--	--	--	--
238	317	236	--	--	--	--
232	270	266	--	--	--	--
670	698	698	--	--	--	--
521	795	561	529	--	--	--
165	406	162	--	--	--	--
336	736	--	--	--	--	--
484	432	--	--	--	--	--
598	598	598	598	598	--	--
45	145	41	--	--	--	--
109	--	159	--	--	--	--
646	--	646	646	--	--	--
336	--	--	--	--	--	--
122	155	117	135	--	--	--
368	--	--	--	--	--	--
52	52	48	--	--	--	--
30	101	26	--	--	--	--
--	--	--	--	--	--	--
819	--	--	--	--	--	--
--	120	100	--	76	--	--
276	276	--	--	--	--	--
241	727	241	--	--	--	--
460	460	460	460	--	--	f
490	490	--	--	--	--	--
71	114	78	--	--	--	--
642	642	--	--	--	--	--
332	615	330	--	--	--	--
598	598	596	560	--	--	--
122	159	116	154	--	--	--

Well number	Local name	County	Date
271856082295401	Forest Lake Golf Course	Sarasota	12-63
271857082285301	Early	Sarasota	1-83
271859082164301	Live Oak Ranch	Sarasota	3-65
271907082315101	Sarasota Hospital	Sarasota	10-68
271910082343701	City of Sarasota	Sarasota	12-79
271917082304801	J. A. Hooper	Sarasota	3-62
271922082241801	George Turner Ranch	Sarasota	1-72
271922082340701	Plymouth Harbour	Sarasota	3-66
271931082233801	Emerald Sod	Sarasota	3-62
271932082313101	Sarasota Junior High School	Sarasota	6-68
271937082321801	Orange Avenue	Sarasota	5-77
271937082322601	Selby	Sarasota	8-74
271938082305501	Meta Physical Church	Sarasota	6-65
271942082315701	Florasota	Sarasota	5-82
271943082315401	City of Sarasota	Sarasota	5-66
271958082175801	Lauck	Sarasota	3-65
271959082270901	E.M.R. Electronics	Sarasota	7-78
272002082342701	City of St. Petersburg	Sarasota	3-83
272006082322301	Old Campbell Plymouth	Sarasota	7-81
272009082302501	Sarasota County Fairgrounds	Sarasota	12-70
272009082324801	City of Sarasota	Sarasota	7-80
272010082352201	Longboat Key	Sarasota	5-69
272015082285401	Sicka	Sarasota	6-78
272018082374801	J. A. Cook	Sarasota	4-62
272019082322601	Ellie Book Store	Sarasota	3-78
272019082354301	Arvida Corporation	Sarasota	8-85
272020082194801	City of Sarasota	Sarasota	12-78
272021082353601	Longboat Utilities	Sarasota	10-85
272023082354801	Longboat Key Golf Course	Sarasota	1-72
272030082260301	Sun N' Fun	Sarasota	10-85
272030082260801	Sun N' Fun	Sarasota	10-85
272031082292901	Irrigation	Sarasota	5-62
272032082250301	Cowart Ranch	Sarasota	3-72
272040082325501	City of Sarasota	Sarasota	3-80
272040082325801	City of Sarasota	Sarasota	3-80
272045082325201	City of Sarasota	Sarasota	7-81
272047082273701	Guest-Rellum Lane	Sarasota	7-78
272047082291501	City of Sarasota	Sarasota	4-81
272048082295801	U.S. Geological Survey	Sarasota	8-66
272049082325001	City of Sarasota	Sarasota	12-80

**Type of log and depth logged,
in feet below land-surface datum**

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
583	583	--	--	--	--	--
--	--	250	--	--	--	--
402	400	--	--	--	--	--
489	593	489	--	--	--	--
397	400	364	--	--	--	--
622	622	--	--	--	--	--
383	687	383	--	--	--	--
132	354	--	--	--	--	--
691	691	--	--	--	--	--
180	214	188	--	--	--	--
--	571	571	572	--	--	--
430	430	--	--	--	--	--
501	--	501	501	--	--	--
625	--	--	--	--	--	--
200	216	--	--	--	--	--
421	421	--	--	--	--	--
168	240	230	--	--	--	--
300	303	302	277	--	--	--
620	620	620	--	--	--	--
500	537	500	--	--	--	--
353	610	410	332	392	--	--
499	499	499	499	499	--	f
59	84	67	89	--	--	--
364	364	--	--	--	--	--
321	--	321	--	--	--	--
390	542	540	526	536	--	--
358	489	--	--	--	--	--
466	460	--	--	--	--	--
242	542	242	--	--	--	--
444	--	444	--	--	--	--
522	635	634	555	624	--	--
622	622	--	--	--	--	--
571	1,033	569	--	--	--	--
527	--	527	490	--	--	--
513	401	524	--	--	--	--
334	350	347	--	--	--	--
80	147	74	130	--	--	--
584	608	608	578	592	--	--
--	36	--	--	--	--	--
137	--	215	--	--	--	--

Well number	Local name	County	Date
272050082325701	City of Sarasota	Sarasota	12-80
272051082275401	Cedar Hollow Subdivision	Sarasota	4-85
272052082325001	City of Sarasota	Sarasota	12-80
272054082293601	Paver Construction Company	Sarasota	7-63
272058082143701	City of Sarasota	Sarasota	11-78
272059082290301	City of St. Petersburg	Sarasota	3-62
272059082325301	Boys Bluff	Sarasota	3-71
272102082324001	Guthery Well	Sarasota	1-79
272104082321801	City of Sarasota	Sarasota	4-79
272104082326001	21-2	Sarasota	10-83
272105082363301	21-5	Sarasota	11-84
272108082320801	City of St. Petersburg	Sarasota	3-62
272113082330201	City of Sarasota	Sarasota	6-78
272119082330701	Webber	Sarasota	7-82
272120082322701	City of Sarasota	Sarasota	6-78
272120082322703	City of Sarasota	Sarasota	5-80
272121082363601	Longboat Key Club	Sarasota	1-82
272122082330801	City of Sarasota	Sarasota	5-80
272122082330801	City of Sarasota	Sarasota	6-80
272123082330901	F. Richards	Sarasota	7-82
272124082292601	Kensington Park	Sarasota	8-62
272126082275201	Meadow's	Sarasota	
272127082323801	City of Sarasota	Sarasota	6-78
272128082200301	Kaimee Ranch	Sarasota	5-63
272128082301501	#12B	Sarasota	8-62
272129082330201	City of Sarasota	Sarasota	6-78
272133082324701	City of Sarasota	Sarasota	6-78
272142082371701	Far Horizons	Sarasota	10-66
272142082371801	Far Horizons	Sarasota	10-66
272151082151801	Verna Well Field	Sarasota	12-76
272151082310701	City of Sarasota	Sarasota	6-80
272153082373001	Longboat Key	Sarasota	10-67
272156082372401	Arvida #3	Sarasota	9-77
272158082370601	Arvida #2	Sarasota	9-77
272158082372801	Longboat Key	Sarasota	10-67
272202082282401	Andrews	Sarasota	11-78
272203082165401	Don D. Ranch	Sarasota	11-72
272203082322101	Wendell Kent Company	Sarasota	1-72
272210082200401	Myakka Ranch	Sarasota	11-72
272213082154901	City of Sarasota	Sarasota	6-72

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
54	--	96	--	--	--	--
500	500	500	--	--	--	--
64	120	116	82	--	--	--
707	707	--	--	--	--	--
400	516	--	--	--	--	--
698	698	--	--	--	--	--
447	447	--	447	447	--	--
617	632	616	616	614	--	--
520	528	530	--	--	--	--
430	430	430	430	430	--	--
521	--	521	521	521	--	--
268	268	--	--	--	--	--
530	525	534	431	--	--	--
393	--	483	--	--	--	--
477	553	480	550	--	--	--
303	552	394	314	--	--	--
136	--	136	156	--	--	--
490	704	794	--	--	--	--
436	539	540	518	--	--	f
450	--	462	--	--	--	--
162	162	--	--	--	--	--
321	--	312	321	--	--	--
642	639	444	642	--	--	--
1,494	--	--	--	--	--	--
106	106	--	--	--	--	--
578	577	572	--	--	--	--
335	337	333	339	--	--	--
295	525	--	--	--	--	--
--	162	--	--	--	--	--
639	635	632	553	520	--	--
638	670	650	--	--	--	--
230	--	--	--	--	--	--
330	331	335	--	--	--	--
316	320	--	--	--	--	--
190	250	250	250	--	--	--
428	700	436	--	--	--	--
549	1,006	546	--	--	--	--
148	196	197	--	--	--	--
763	888	750	--	--	--	--
429	599	426	--	--	--	--

Well number	Local name	County	Date
272219082151701	City of Sarasota	Sarasota	4-79
272221082300801	Lake Iola Grove	Sarasota	5-65
272221082320301	North Gate Industrial Park	Sarasota	6-80
272222082283201	Horace Sutcliffe	Sarasota	11-78
272228082333401	Sapphire Heights	Sarasota	3-62
272233082151101	City of Sarasota	Sarasota	10-83
272237082331601	Days Inn Motel, North Trail	Sarasota	11-78
272242082235501	Manatee Schroeder	Sarasota	7-76
272248082162801	City of Sarasota	Sarasota	4-79
272248082170101	City of Sarasota	Sarasota	12-71
272248082170201	City of Sarasota	Sarasota	4-80
272248082171901	City of Sarasota	Sarasota	1-66
272248082173601	City of Sarasota	Sarasota	4-80
272248082175201	City of Sarasota	Sarasota	7-71
272248082175301	City of Sarasota	Sarasota	11-65
272248082182701	City of Sarasota	Sarasota	5-86
272248082184501	City of Sarasota	Sarasota	1-72
272248082184601	City of Sarasota	Sarasota	2-66
272248082190201	City of Sarasota	Sarasota	12-71
272249082182601	City of Sarasota	Sarasota	12-71
272249082373301	Arvida #1	Sarasota	9-77
272254082234901	Manatee Schroeder	Sarasota	7-76
272254082332801	Ringling Museum	Sarasota	10-64
272255082172201	City of Sarasota	Sarasota	2-65
272255082180201	City of Sarasota	Sarasota	12-71
272256082175901	City of Sarasota	Sarasota	11-78
272256082321701	Mobile Life Corporation	Sarasota	10-64
272257082162801	City of Sarasota	Sarasota	4-79
272257082165401	City of Sarasota	Sarasota	4-81
272257082171101	City of Sarasota	Sarasota	3-81
272257082172901	City of Sarasota	Sarasota	1-72
272257082174401	City of Sarasota	Sarasota	1-66
272257082181601	City of Sarasota	Sarasota	1-72
272257082181801	City of Sarasota	Sarasota	1-66
272257082183501	City of Sarasota	Sarasota	12-71
272257082183601	City of Sarasota	Sarasota	8-84
272257082185301	City of Sarasota	Sarasota	1-72
272257082185401	City of Sarasota	Sarasota	5-80
272257082333701	City of Sarasota	Sarasota	11-83
272301082191401	City of Sarasota	Sarasota	4-81

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
591	712	610	584	--	--	--
350	--	--	--	--	--	--
556	554	554	--	--	--	--
16	126	16	--	--	--	--
488	488	--	--	--	--	--
470	596	450	480	--	--	--
342	375	356	358	--	--	--
967	1,368	1,358	--	--	--	--
369	476	370	--	--	--	--
69	121	68	--	--	--	--
369	502	448	383	--	--	--
494	493	--	--	--	--	--
355	473	456	356	--	--	--
34	--	--	--	--	--	--
--	484	479	484	--	--	--
474	603	476	478	530	--	--
--	74	--	--	--	--	--
376	--	--	--	--	--	--
52	138	50	--	--	--	--
--	107	--	--	--	--	--
155	155	155	--	--	--	--
880	--	--	--	--	--	--
320	320	--	--	--	--	--
700	--	--	700	--	--	--
11	122	131	--	--	--	--
357	496	--	--	--	--	--
536	536	--	--	--	--	--
313	451	366	334	330	--	--
356	470	393	432	--	--	--
356	500	400	392	--	--	--
29	83	26	--	--	--	--
468	468	464	470	--	--	--
20	102	20	--	--	--	--
478	--	--	478	--	--	--
10	93	10	--	--	--	--
482	609	512	--	560	--	--
--	103	--	--	--	--	--
476	606	478	490	--	--	--
550	543	548	--	--	--	--
526	734	734	550	854	--	--

Well number	Local name	County	Date
272305082190201	City of Sarasota	Sarasota	7-71
272305082190301	City of Sarasota	Sarasota	1-66
272306082182601	City of Sarasota	Sarasota	12-71
272306082182701	City of Sarasota	Sarasota	5-80
272306082184501	City of Sarasota	Sarasota	1-72
272306082184601	City of Sarasota	Sarasota	4-79
272307082164501	City of Sarasota	Sarasota	11-65
272307082170201	City of Sarasota	Sarasota	1-66
272307082171701	City of Sarasota	Sarasota	1-72
272307082171801	City of Sarasota	Sarasota	5-80
272307082173701	City of Sarasota	Sarasota	2-81
272307082173801	City of Sarasota	Sarasota	2-72
272307082180801	City of Sarasota	Sarasota	1-72
272307082180901	City of Sarasota	Sarasota	1-66
272307082182701	City of Sarasota	Sarasota	1-66
272308082175301	City of Sarasota	Sarasota	1-66
272310082200401	Myakka Ranch	Sarasota	11-72
272313082320801	Montgomery Ward	Sarasota	10-64
272317082285901	Sarasota County	Sarasota	7-85
272317082291901	Sarasota County	Sarasota	11-85
272317082294401	Sarasota County	Sarasota	3-86
272317082295201	Sarasota County Utilities	Sarasota	5-86
272317082295801	Sarasota County	Sarasota	7-85
272317082295802	Sarasota County	Sarasota	7-85
272317082300901	Sarasota County	Sarasota	1-86
272317082302401	Sarasota County	Sarasota	10-82
272317082331501	Sarasota Manatee Airport	Sarasota	10-64
272318082302301	Sarasota County	Sarasota	3-83
272344082314201	Midway Groves	Sarasota	2-77
272357082181301	U.S. Geological Survey	Sarasota	10-66
272403082312101	Blaser's #2	Sarasota	10-73
272703082165401	Don N. Ranch	Sarasota	11-72
275652082185801	Englewood	Sarasota	2-76
275927082193201	Englewood Water District	Sarasota	7-76

Type of log and depth logged,
in feet below land-surface datum

Electric	Gamma-ray	Caliper	Fluid conductivity	Tempera-ture	Flow meter	Other
--	71	--	--	--	--	--
498	498	--	--	--	--	--
--	88	--	--	--	--	--
364	498	385	380	--	--	--
--	88	--	--	--	--	--
418	537	421	414	--	--	--
404	404	392	--	--	--	--
400	400	394	--	--	--	--
85	124	--	--	--	--	--
356	486	362	--	--	--	--
364	--	476	397	--	--	--
41	124	39	--	--	--	--
54	126	39	--	--	--	--
470	470	--	--	--	--	--
476	476	--	--	--	--	--
517	517	457	517	--	--	--
763	888	750	--	--	--	--
382	382	--	--	--	--	--
--	525	522	511	526	--	--
263	637	275	259	629	--	--
358	600	570	--	--	--	--
182	578	190	182	576	--	--
347	381	381	--	--	--	--
--	525	522	511	526	--	--
264	574	210	--	570	--	--
341	341	--	567	560	--	--
99	--	--	--	--	--	--
286	602	603	385	508	--	--
186	218	204	217	--	--	--
450	435	--	--	--	--	--
638	630	630	--	--	--	--
543	1,006	546	--	--	--	--
--	--	92	--	--	--	--
68	106	69	--	--	--	--

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